

Isaac Asimov THE DEAD-END MIDDLE

THE MAGAZINE OF
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DECEMBER

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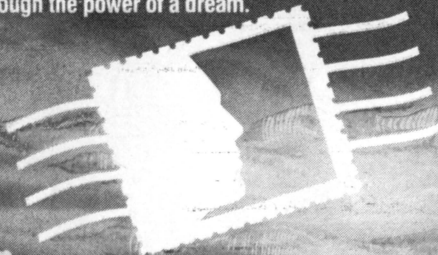
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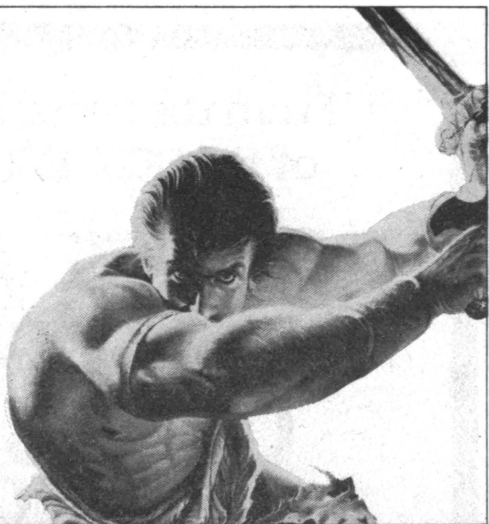
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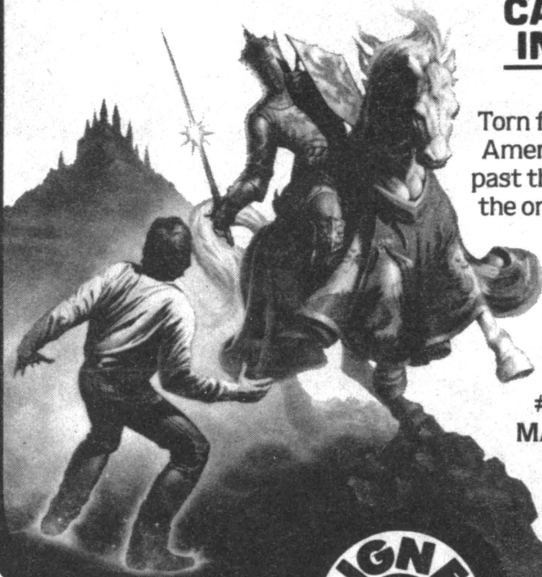
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COVER BY COREY WOLFE FOR "SPIRITS FROM THE VASTY DEEP"

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Pamela Sargent's recent books include two novels, VENUS OF DREAMS (Bantam) and THE SHORE OF WOMEN (Crown), as well as an anthology edited with Ian Watson titled AFTER-LIVES (Vintage). Her new story for F&SF is a compelling tale about a reunion of sorts that turns into a nightmare . . .

The Soul's Shadow

BY

PAMELA SARGENT

The man had followed Jacqueline onto the pier. He stepped toward her, smiled, then walked back toward the steps leading down to the beach.

He had nodded at her when she passed him before; his grayish green eyes seemed familiar. He might be a former student. Her memory for faces was poor, and often she forgot what even her best students looked like once they graduated. All she noticed about most of them now was their youth; they were currents in an ever-renewed stream while she aged on the shore, eroded by their movement through her life.

She leaned against the railing. He was below her on the sand, gazing out at the ocean; he glanced up as the wind ruffled his blond hair. She looked away. He couldn't have been a student; even with her poor memory, Jacqueline was sure she would have

remembered him. He had the tanned, handsome face of a television actor and the body of a man who frequented gyms; he was exactly the kind of man she would expect to see here on a California beach. He would not have been in her classes, which drew intense or slightly neurotic humanities majors; aggressive and grade-conscious prelaw students; or studious, asexual, aspiring scientists trying to fulfill a philosophy requirement. She would have noticed anyone so atypical.

She turned her head slightly and caught a glimpse of his light brown windbreaker. As she felt his eyes on her, she looked away again. Was he trying to pick her up? She was flattering herself by assuming that. She supposed that he was either wealthy or out of work; vacationers were not likely to come here in February. He

might be one of those Californian psychopaths who her friends back East assumed haunted these shores.

From the pier, it seemed that a structure had been built on every available piece of land; houses, condominiums, and other buildings covered the hills overlooking the wide bay. The Strand was a wide sidewalk and bicycle path running north and south; beneath the low wall separating the Strand from the beach, the sand was white and clean. Everything seemed cleaner here; the beach was tended, the houses kept up, the cars unmarked by rust or mud. Jacqueline could not smell the sea; the odors of fish and salt water were absent. The past did not exist, only a continuous, ever-changing present.

She gazed south toward another, larger pier that held shops and restaurants; beyond, a green peninsula marked by sheer, precipitous cliffs jutted into the sea. She propped an elbow against the rail, then noticed that the blond man was gone. He had been there only a moment before; she turned toward the row of houses overlooking the beach. Two skaters, legs pumping, rolled along the Strand; three joggers were trotting south. The man had vanished.

Jacqueline opened the refrigerator door, took out a jug of wine, then leaned against the counter as her cousin and her old friend gossiped in the living room.

"You've got to come," her cousin Patti had told her over the phone a month before. It had seemed a good idea then. Jacqueline was on sabbatical, while Patti and her husband were moving out of their condominium to a house nearby. The condo would be vacant for a couple of months until the new tenants moved in; she could stay there and have the place to herself. Jacqueline had been unable to refuse; the monograph she was working on was finished and needed only retyping. Patti had mentioned getting together with their old friends Dena and Louise only after Jacqueline already had her plane ticket.

She folded her arms, thinking of other times, twenty years before, when she had gone into her mother's kitchen to fetch Cokes and potato chips while Patti, Louise and Dena had gossiped about parties and boys. She had gradually become part of their group, hoping that some of their lofty social status in high school would rub off on her. By associating with them, she did not have to endure the slights and cruel comments many of the more studious students suffered.

She had escaped them with a scholarship to an eastern women's college. She had found new friends among young women she would have avoided in high school, people with whom she could share her intellectual interests. She had occasionally reflected on the time she had wasted

in her struggle to be liked and accepted by Patti's circle, but she did not have the courage to group herself with the outcasts then, had preferred her place, however tenuous, with the clique of cheerleaders, jocks and partygoers.

Jacqueline had nearly forgotten this aspect of the youthfulness she sometimes longed for — the fear of rejection, of being different, awkward, unliked. Her doctorate, the fellowship, the published papers and books would mean little to the other women, who led the kind of life others envied.

"There you are!" Dena was standing in the entrance to the kitchen; somehow Jacqueline had missed hearing her enter.

"Dena," she said, trying to sound pleased. Dena's body, like Patti's and Louise's, seemed shaped by aerobics and starvation.

"Funny, isn't it? We kept saying we had to get together sometime, but you had to come three thousand miles just to get us all into the same room." Dena shook back her long black hair. "Well, you finally got here." Patti and Louise had said exactly the same thing. "It'll be just like old times."

They caught up with one another as they sat on the floor around a glass-topped coffee table. Louise had moved from Palos Verdes to a house a few miles away and was living on a

generous divorce settlement, while Dena, who had recently bought a place in Manhattan Beach, sold real estate.

"I was out here for a year before I bought my old place," Dena murmured in her husky voice as she poured more wine. "That was a mistake. I should have bought something — anything — the minute I stepped off the plane. Things are slower now."

"Joe really lucked out on that piece of land he bought," Patti said. "He wants me to stay home when we have our kid, and I guess we can afford it."

Dena lifted a brow. "A kid, huh?"

"We're trying. Deadline decade, you know."

Louise shook her blonde head. "Stop with one. One's enough, believe me."

Dena turned toward Jacqueline. "Didn't you say you were living with a guy?"

"Another professor," Jacqueline replied. "He's in the English department. We've been together for almost ten years."

Dena sighed. "Long time. Is he cute?"

Jacqueline thought of Jerome's long face, graying beard, and thinning hair. "He's tall. He's in pretty good shape. I don't know if I'd call him cute."

"Well, now that you're here," Louise said, "when are you going to move?" Jacqueline was silent. "Don't

tell me you want to stay back East now. You could teach out here, couldn't you?"

"It's not that easy. I'm lucky to have the position I've got. The world isn't exactly short of Ph.D.'s in philosophy."

Louise tapped one manicured finger against her cheek; she had a faint, golden tan, just enough to make her glow without turning her skin leathery. "Patti said you were writing a book."

"A monograph on Plato's *Philebus*. I figured I'd pick a dialogue people hadn't written that much about. That's hard to find when scholars have had over two thousand years to mess around with Plato."

Louise stared at her blankly. "I saw Clint Eastwood in the airport last month," Patti said, "just from a distance. He looked emaciated."

"If they look thin on the screen," Dena said, "they look absolutely anorexic in person." She nibbled at a shrimp. "Didn't David Lee Roth film a video around here?"

Jacqueline stood up. "I think we need some air." The others didn't seem to hear her. The topics of real estate and celebrity-spotting could probably keep them occupied for hours, and Louise had been married to a celebrity of sorts herself.

She crossed the room, opened the sliding glass door, and stepped out onto the terrace. The condo was on the second floor; the Strand and the

beach beyond it were less than a block away. The wind had grown warmer. The sun was a bright red disk just above the gray water; she had watched it set last evening, surprised at how suddenly it dropped below the horizon. To the south, Catalina was a misty gray form, barely a suggestion of an island. Cyclers and runners moved along the Strand; other people were entering a restaurant across the street.

She reached into her shirt pocket for her cigarettes and lit one. She would call Jerome later; he had told her not to waste the money, but she needed to hear his voice. Her eyes narrowed. The blond man she had seen by the pier was sitting on the low wall between the Strand and the beach; he stood up and began to walk toward her.

"— very eastern habit," Louise said behind Jacqueline.

"What?"

"Smoking. The only time anyone smoked in my house was when somebody from back East was visiting." Louise moved toward the railing as the other two women came outside, then lifted a hand to the collar of her blue silk shirt. "Will you look at that." She lowered her gaze to the blond man.

Dena moved closer to Louise. "Do you know him?"

Louise shook her head. "But I saw him just this morning, near my driveway. He was definitely flirting."

"That's funny," Dena said, sounding annoyed. "I saw him last night at Orville and Wilbur's, at the bar. He smiled at me, but when I looked back, he was gone."

"Sure it was the same guy?"

"I don't forget men who look like that."

"He gets around, then." Patti's thick, pale hair swayed as she leaned over the railing. "He was outside my house when I left for work. I thought he was casing the place."

"Hello," the man said then. The sound of a passing car and the music coming from the nearby restaurant seemed to fade as he spoke. The sun disappeared; he moved closer to the light over the sidewalk below. "So you're all together again."

Louise's hands fluttered. "Do we know you?"

"I know you," he replied. "Couldn't forget you, Louise, or Dena there, or Patti, and especially not Jackie."

Jacqueline swallowed. "Who are you?" she managed to say.

"An old classmate." He thrust his hands into the pockets of his windbreaker. "Maybe you don't remember me — I wasn't exactly part of your crowd. I'm Tad Braun."

Patti started. "You're Tad Braun?"

He nodded. Jacqueline now recalled the last time she had seen those grayish green eyes, but they had looked out at her from the flaccid, pimply face of a fat, awkward

boy. Tad Braun had transformed himself. The awkwardness was gone, the oily hair golden, the fat turned into muscle; perhaps a plastic surgeon had chiseled his face and smoothed his skin.

"You sure have changed," Dena said.

Tad shrugged. "So have all of you. You were attractive then, but you look even better now." That might be true of the others, Jacqueline thought, but it couldn't be true of her. "Maybe I'll see you again." He moved away into the shadows before any of them could speak.

Patti let out her breath. "Who would have thought Tad Braun would turn into such a hunk? I wonder what he's doing now."

"I barely remember him," Louise said. "Wasn't he that awful boy who we —"

Jacqueline did not want to remember. "We were pretty cruel to him, weren't we? But we were cruel to a lot of kids when they didn't meet our standards."

Dena's dark eyes widened. "Oh, come on. That was a long time ago. Nobody remembers things like that."

"The victimizers probably don't," Jacqueline said. "The victims do."

The night air was colder. The four walked back into the empty room and settled around the coffee table. The shrimp and raw vegetables were nearly gone; Jacqueline stubbed out her cigarette as Patti lit a joint.

"Maybe we should have asked him up," Louise said. "Of course, I have to be careful about the guys I see."

"Herpes," Patti muttered.

"No, visitation rights. I wouldn't put it past my goddamn ex to use any excuse to cut them back. I see Chris little enough as it is."

"He has custody?" Jacqueline asked, surprised.

Louise's mouth twisted. "I guess you professors don't read *People* regularly. I needed the settlement, and if I'd fought for Chris, I might have gotten much less."

Jacqueline said nothing.

"Look, I couldn't have raised him without a good settlement. You need at least thirty thousand a year here just to stay off the streets. And just try to go up against one of the NFL's former golden boys in court." Louise poured more wine. "Bob's been born again, you know. I suppose he'll marry that Baptist bimbo he's been going to Bible study with." The blonde woman glanced at Dena. "Well, there's nothing to stop you from seeing old Tad."

"There's Sadegh," Dena replied, "but I don't know how long that'll last. I'm too old for him — he's forty-two and I'm thirty-six. Trouble is, he likes eighteen-year-olds."

"And I'm an old married lady trying to get pregnant." Patti took another toke on her joint. "Guess I should give this up. I don't even know if I really want a kid, but Joe does. Any-

way, what else can I do?"

"Jackie could ask Tad over for a drink," Louise said.

"I'm living with somebody."

"Yeah, but he's three thousand miles away."

Patti propped her elbows on the table. "You told me it was no strings with you and Jerome."

No strings, Jacqueline thought. She had fashioned the strings and turned them into cords. Except for a brief trip to Chicago for a classics conference, she had not even been on a plane without Jerome until now. She could not even tell if she still loved him or was only afraid of being alone.

Lately he made her feel old. Neither of them even went through the motions of trying to find positions at a better school. They had their tenure, published enough to keep up the reputation of scholarship, and revised lectures each of them had given several times before. Each year, they were confronted by a sea of ever-younger faces. At night, suspended in the moment between consciousness and sleep, Jacqueline often imagined that she was suddenly an old woman, that the years had flown by and had left her ill and weak with no one to tend her, no one to care what became of her.

"I can't imagine why Tad Braun would want to see any of us." Jacqueline looked around at the pretty, ageless faces of the other three women, certain that they would not un-

derstand what she was about to say. "Tad was a gentle, sensitive boy, but we didn't care about that, couldn't see it. Now, at least, his beauty reflects the truth about what he was inside."

Patti finished her joint; the others were silent.

"Well," Patti said after a moment, "I've got an early day tomorrow. Listen, why don't you all come to the house on Saturday? Joe's going to be out. Come over around noon. We'll sit around and swill wine and go out to dinner."

Dena nodded. "I think I can take the day off."

"Fine with me," Louise said.

"Sure," Jacqueline murmured. "It'll be fun."

It was admitted near the beginning of the Philebus that pleasure and intelligence are both parts of the good life, and yet we cannot decide which is closer to the good (or which determines the character of the good life) without concerning ourselves with what "the good" is.

Jacqueline looked up from her typewriter. This was hardly a concern of the people out here, who had their own ideas about the good life. They would have taken Callicles' position in this dialogue and argued for pleasure. She ruffled through the pages of the manuscript she was re-

typing, unable to concentrate; the intellectual pleasures Plato valued so highly could not overcome her restlessness.

She glanced at her watch. She had not called Jerome last night, but he might be in his office now. Sarita Ames was teaching at UCLA; she could get together with her old classmate and bitch about how many philosophy departments still held Aristotle's view of women. Giles Gunderson was at Irvine; there were a number of colleagues she might contact out here. They might draw her out of the spell Patti and her friends had cast, remind her that she was no longer a high school girl who envied the pretty and popular.

She stood up and crossed to the bed. Telephone directories lay next to the telephone on the floor. She was leafing through the B's before she realized that she was looking for Tad's number. No Thaddeus Braun was listed in the local directory, and the Los Angeles book seemed a formidable obstacle.

She went to the bedroom window and peered out. Tad was standing near the beach; she felt as though she had summoned him somehow. She hurried into the living room, but hesitated in front of the sliding glass door before she opened it.

Tad strolled up the street, then halted below the terrace and raised a hand in greeting. "Hello, Jackie."

"Tad." She tried to think of some-

thing to say. "Are you vacationing, or do you live out here?"

"I've been out here for a while." He had not really answered her question. Was he unemployed, looking for a position? Tad had been one of the better math students when she knew him; perhaps he did free-lance consulting work for computer firms. "You're visiting, aren't you?"

She nodded.

"Mind if I come up for some coffee? You can tell me what you've been doing."

"I'll come down," Jacqueline said hastily. She backed away, closed the glass door, and hurried to the bedroom for her jacket. Better, she thought, to talk to him outside; she might have known him once, but he was a stranger now.

As she came outside, he took her arm and led her toward the Strand. She almost pulled away, surprised at how ill at ease she felt.

"How are all of you doing?" Tad asked. "You know — you and the other members of the Bod Squad." She glanced at him sharply. "Come on, Jackie — a lot of guys in school called you that. Not the ones you went out with, just the ones who didn't have a chance with you."

"Oh, we knew. We didn't much care for the term." She paused. "You might have read something about Louise's ex-husband; he used to play

for the Rams. He gave her a good settlement. Dena's selling houses to rich people and going out with an Iranian millionaire from Beverly Hills."

"What about you?"

"I'm just a philosophy professor on sabbatical. Patti invited me out when she and her husband were moving into their house, said their condo would be free until their new tenants moved in. Her husband's a car dealer, kept pointing out his showrooms all the way in from LAX."

Two women cycled by as they came to the Strand. Tad gripped her arm more tightly. "Let's walk down to the water."

She was about to refuse. Except for a couple of surfers in wet suits near the pier, the beach was nearly deserted. She was suddenly afraid of being alone with him, but he could hardly harm her there, in sight of the houses lining the Strand.

He led her through the opening in the wall onto the sand. A group of gulls alighted near them, watching with beady eyes as they passed. She shivered; Tad, in a tweed jacket and jeans, did not seem to notice the chill. "It's colder than I expected," she said. "I guess all that propaganda made me think you have an endless summer out here."

"I was surprised to see you," Tad said. "I wanted to speak to you on the pier, but then I thought you might not want to see me. I was thinking of

the last time —”

“I was hoping you’d forgotten that,” she said quickly.

“Oh, I can’t blame you. I must have seemed pretty hopeless.”

She slipped her arm from his and walked toward the ocean. It was all coming back to her now, more vividly than she had ever recalled it before.

He had been the fat, pimpled boy who sat next to her in geometry. She had paid little attention to him, but he had surprised her by calling her up one day to talk about their homework.

Tad did not ask her out; she doubted he had ever dated anyone. But she pitied him a little and could talk to him about her ambitions, the books she read, the interests she usually cloaked. She did not ask him to her house, but occasionally met him in places where her friends were not likely to see them — at the playground for small children near her street, or at a delicatessen in the city adjoining their suburb. They met only to talk; she did not think of their meetings as dates. She might have guessed that Tad would assign more importance to them.

He called her early one Friday evening. He had walked two miles from his house to her neighborhood and was calling from a pay phone; he wanted to come over. Carelessly, she agreed.

Patti, Louise and Dena arrived on-

ly moments after she hung up. Her face burned as she listened to the babble of her friends and tried to think of how to get rid of them. Patti was saying something about a party; Jacqueline could guess what her cousin would think when she saw Tad.

Her friends were unusually perceptive that evening and noticed her nervousness almost immediately; she had to speak. “I can’t go,” she blurted out. “Someone’s coming over.”

“Who?” Patti asked.

“It’s — well, it’s Tad Braun. It’s just — he’s supposed to help me with some homework.”

Dena rolled her eyes; Louise looked disgusted. “Tad Braun?” Patti shrieked. “You’re going to see Tad Braun on a Friday night?”

“It’s almost like having a date with him,” Dena said.

“I need some help in geometry,” Jacqueline mumbled. She knew it was a poor reason to give as soon as she spoke. The other girls were aware of her grades; they had copied her homework often enough.

“Maybe Jackie likes him,” Louise said maliciously. “Wait until I tell —”

“I don’t!” Jacqueline cried, terrified of what the other girls might do. She was in the middle of denying Louise’s suspicions when Tad came to the door.

She knew that she should have sent him away quickly, tried to tell him she would call him later, but that hadn’t been enough for her friends.

They pulled him through the door, ushered him to the sofa, and made the bewildered boy sit down as they grouped themselves around him. Their words, their callous remarks and cruel comments about his weight, his complexion, his clumsiness, awful clothes, and wretched personality had been designed to show him his place and rob him of any shred of self-esteem. His face grew mottled with humiliation; Jacqueline saw the message in his pained eyes as he looked at her. Tell them I'm your friend, his eyes said; tell them that you hate what they're saying, that I mean something to you.

But she said nothing; she even laughed with her friends. He shot her one last glance before he fled the room; she had been surprised to see no anger, only despair.

She had made her choice and betrayed him. Tad had disappeared from school after that amid rumors he was ill; she had not even called his parents to find out how he was, and found out only later that his parents had sent him to another school elsewhere.

The sand shifted under her feet. She turned as Tad came up to her side. "What are you thinking about?" he asked.

"How heartless I was before."

He adjusted the collar of his jacket. "I thought I was in love with you back in high school. I think I had a

crush on all of you in a way, but you were the only one who would talk to me. I kept hoping, I thought I'd never get over —" He paused. "Well, that's past. I doubt the others even remember."

She looked up at his handsome, even-featured face. At close range, his features were almost too perfect, as if he were hardly human at all. "You've changed a lot, Tad. You've probably had plenty of opportunities to forget us."

He shook his head. "I couldn't forget you. You were the first girl I loved. You don't forget that."

She sat down on a sandy slope; he seated himself next to her. "I was a fraud then," she said. "It was all a pose. I was so afraid of —"

"I can understand that."

"I'm still a fraud. I do my work, and I suppose I do it well enough, but it isn't really my life in the way it should be. I'm supposedly a Plato scholar. Plato valued the life of the mind above all, but I don't know if I do or not." She laughed softly. "How naive that sounds. I used to think that once you assented to an argument's validity, you'd have to change your views, even your life if necessary. One of my professors found that notion quite amusing. He said I had it the wrong way around, that philosophers find arguments to justify only what they already believe."

Tad was gazing at her steadily; she was surprised to see warmth and

sympathy in his eyes. "I'm supposed to be writing a monograph on Plato's *Philebus*," she continued.

"I studied some philo in college," Tad said. "Mostly courses in symbolic logic, but I did read some Plato."

"It's the dialogue where Plato deals with the relation of pleasure to the good and tries to show the comparative worthlessness of physical pleasures. He shows the contradictions involved in asserting that pleasure alone is the good, but he can't conclusively disprove that purely hedonistic belief. All he can really do is to show that the life of the mind, the intellect, is a truer pleasure than those most people seek." She sighed. "Maybe I shouldn't have come out here. It's just made the contradictions in my own life more evident. If I really believed in the choices I made, I wouldn't still envy my friends."

"I'm afraid my intellectual pleasures were the only ones I had," Tad said. "Math interested me the most. It seemed to take me to that realm of forms Plato wrote about, where objective truth could be found. I could forget the world then, see it as an illusion, as only the dimmest reflection of the real realm of truth and beauty, as only shadows on the wall of a cave in which people are trapped. Mathematics was far more real to me than the physical world."

That, she thought, was a Platonic enough notion. Tad went on speaking of how much each thing in the

world also existed as a mathematical possibility; the world would change and eventually die, but the possibilities mathematical sets expressed would always exist, were in fact eternal. But he also seemed to think that the barrier between the physical world and this mathematical one could be breached, that a way of breaching it could be expressed mathematically, that the manipulation of certain symbols by itself could transform physical facts. As he spoke, she lost the thread of his argument, unable to tell if he was talking about applied mathematics or some sort of magical mumbo jumbo. Words seemed inadequate for what he was trying to say.

"I explored this for a long time," he went on. "I was trying to see past the illusions of time and space. Each moment of time became another bead on an endless chain, while the world itself seemed almost like a series of cross sections, a cutaway set in which, if you could see it all, you could move to anyplace in it almost instantly."

He fell silent; she heard only the rhythmical pounding of the waves against the shore. She felt that if she turned, she would see only bare hills, discover that the world she knew had vanished.

"We used to talk this way," he said at last. "I've missed you, Jackie. I kept imagining that I'd meet you again. I think I'm still in love with you."

He pulled her to her feet and

drew her toward him. As he kissed her, she stepped back, startled at how aroused she felt.

"This is ridiculous." Another woman seemed to be speaking the words, not Jacqueline herself. "We haven't seen each other for twenty years. I don't know anything about you. You can't be in love with me."

"I know what I feel. I wouldn't be here with you now if I didn't think you wanted me, too."

"There's someone else. I'm living with a man."

"Jackie." He kissed her again. Her arms were around him, clutching at his back. He drew away and encircled her waist with his arm. "I love you," he said as they walked back up the beach.

Jacqueline opened her eyes and stared at the bedroom ceiling. Tad was gone; she could not remember when he had left. For the past three days, it had been like that; Tad had exhausted her with his lovemaking and had been absent when she awoke. She would shower, dress, and go to the terrace; he was inevitably below in the street, waiting.

Her memories were hazy and blurred. She dimly recalled that Tad had driven her to a restaurant overlooking the beach in the Fiat that Patti had loaned her. There had been a drive up the coast to Marina del Rey and drinks at a bar, but she had only

the faintest recollection of the sailboats and yachts in the harbor there.

Other memories were more vivid — the touch of Tad's hands, the feel of his muscled body, his whispered endearments as he made love to her. Thinking of him made her want him even more; he had awakened desires she had believed dormant or dead.

She sat up abruptly. Three days, and she knew about as little of Tad's life as she had known when she first saw him. They had talked about her life and her problems, or had sat together in a comfortable silence, whenever they were not making love. He had to live nearby, since she had never seen his car, but he had not shown her his home. He had enough money to buy her overpriced drinks and an expensive dinner, but she did not know how he got it. She had been content to tell him about herself while asking no questions about his life; he had been the perfect lover, responding to her needs without imposing his own.

Now she was appalled at herself, thinking of the risks she had taken. Tad might have herpes or some other disease. She had not even thought of contraception; her diaphragm was back East in her apartment, where its presence might serve to reassure Jerome.

It was Saturday; Jerome would be home, perhaps hoping she would call. She reached for the telephone, dialed the number, and waited until it had

rung fifteen times before hanging up.

She climbed out of bed, reached for the watch on the folding table where her typewriter stood, then saw that it was nearly noon. Patti would be expecting her. Her cousin had not called during the past days; she wondered why.

Jacqueline hurried into the adjoining bathroom, pressing the light switch as she entered. The face staring at her from the bathroom mirror looked haggard; the harsh light revealed all her flaws. Tiny lines she had never noticed before marked the skin around her eyes; at her temples a few strands of silver stood out against her auburn hair. She had gained almost fifteen pounds since high school, but her face had stayed youthful; the light made her seem ten years older.

Tad had insisted that she was still beautiful to him. He might be waiting for her now, below the terrace; she wanted to be with him, to hear his reassuring words. She forced the thought of him from her mind.

Patti's house was a wooden structure with large, glassy windows overlooking the sloping road. Stone walls separated the house from its neighbors; a stocky, dark-skinned man was toiling in Patti's tiny flower garden. Jacqueline parked, then climbed the steps leading to the side door.

Patti led her to the patio out back; Dena and Louise were sitting by the

pool. Dena stood up, smoothed down her shorts, then handed a glass of wine to Jacqueline. "Tried to call you," Dena said. "Hope you've seen some of the sights. When you live out here, you turn into a tour guide for visitors."

"I would have called," Louise said, "but —" She smiled and lowered her eyelids. "I thought Bob had vaccinated me against serious relationships, but there's someone —"

Dena sat down again. "Do tell."

"Oh no. This is something special. I don't want to ruin it. You'll find out soon enough."

The weather had grown warm. Jacqueline set down her glass, then shrugged out of her jacket. In the daylight, Louise's face seemed puffer; her chin sagged a little, and her breasts drooped slightly under her red halter. Dena brushed her black hair from her face; Jacqueline thought she saw some gray, then noticed a small, bulging vein on one of Dena's tanned legs. Even Patti looked a bit older; her cheeks sagged just a little. Jacqueline felt a guilty pleasure, quickly suppressed, at seeing that the others were not quite so ageless after all.

They talked about high school days, real estate, and men. Dena and her millionaire had parted company, but she did not seem all that unhappy about it. Louise mocked her ex-husband, while Patti enumerated Joe's

various faults. Louise remained sober enough to drive them to a restaurant in her Mercedes; there they giggled and recited old high school cheers over margaritas. Yet somehow, to Jacqueline, their joviality seemed forced. They all lapsed into awkward silences before rushing to fill them with words; Dena seemed distracted, while Louise kept staring into space.

Jacqueline had expected the two to linger at Patti's house after dinner, but both women seemed in a hurry to get home. "We should get together this week," Patti said as Dena got into her Jaguar. "I'll call you — maybe we can meet at your place, or Louise's." Dena nodded, then followed Louise's Mercedes down the street.

"I'm really beat," Jacqueline said. "Good thing I don't have far to drive. Anyway, Joe should be home soon."

"I have to talk to you." Patti hurried up the steps; Jacqueline followed her into the house. Patti turned on a light and crossed the living room to the wide window, keeping her back to Jacqueline.

"What is it, Patti?" Jacqueline sat down on one end of the modular couch. "Is something wrong between you and Joe? You were being pretty hard on him this afternoon."

"I'm having an affair."

This was a surprise. "Is it just a passing thing, or is it serious?"

"At first it was just curiosity. I've never been unfaithful to Joe before. You know how it is. The spark goes

out, you fall into a routine, you want something different. But I think I'm really in love this time." Patti continued to stare out the window. "I can tell you. I don't think I could say it to Dena or Louise. I'm sleeping with Tad Braun."

Jacqueline struggled for control, grateful that Patti could not see her face. The pain of Tad's betrayal was sharp. "How long?" she managed to ask.

"You must know — just since that night we saw him. He came here the very next day, right after I was home from work. He says he's been in love with me for years, that he had a crush on me in high school. I called in sick the next day and saw him again. Joe's always home late — it was easy to see Tad."

Jacqueline was silent. Patti turned and paced toward the fireplace; Jacqueline composed her face. "It's crazy, I know," Patti said. "I don't even know where he lives, or what he's doing, I just know I have to be with him. It isn't just the sex — he understands me; he listens to me."

Jacqueline closed her eyes for a moment. She should have guessed she wasn't the only woman in Tad's life, that his sincere-sounding words were only a line designed to hook the vulnerable, but he might have found someone besides her cousin. How had he even managed it? He had been with her for much of the past three days, would have had to rush away

while she was asleep. That was possible; Patti's house was only half a mile from the condominium. She had lost track of time with him, but was his energy limitless? How could he have had any strength left for Patti?

"You're shocked," Patti said.

Jacqueline lit a cigarette. "I'm a little startled," she said, trying to mask her hurt. "You have a pretty good life with Joe. Do you want to throw it away?"

"I don't care about that now. Tad's what I want; I think he's the kind of man I wanted all along. I can't even think of anything else when I'm with him."

"But you've admitted you don't know anything about him."

"I know what I have to know, and he says he needs me."

She would be doing her cousin a favor if she told Patti that Tad had seen her as well. Patti would be angry, but the news might be enough to make her give him up.

Jacqueline was about to speak, then hesitated. Patti might only get angry at her or refuse to believe the story. If she got jealous enough, Jacqueline could hardly stay on in her condo with a car borrowed from one of Joe's showrooms; she would have to go home, and might not see Tad again. That possibility tore at her. Even now, she still longed for Tad; he must have sensed her weakness, her need.

"You feel that way now," Jacque-

line said, "but it won't last. You might find out later that Tad isn't what you wanted, either. Stop seeing him before it's too late. Joe doesn't have to know."

"I'm in love with Tad."

"You just think you are." Jacqueline took a breath, wondering if she was trying to help Patti or only trying to win Tad for herself. She stubbed out her cigarette. "Patti, you're tired, and we've both had too much to drink. It'll look different tomorrow, believe me."

Patti sank down onto the stone hearth. "You don't understand; you don't know how I feel." She looked up suddenly. "You won't say anything."

"Of course not." Jacqueline stood up. "Look, maybe you can take an afternoon off this week and show me the sights. I don't think I'm ready to take on the freeways alone."

"I'll see." Patti's voice was flat.

Jacqueline tossed on her bed restlessly, unable to sleep. The sound of passing cars outside was competing with the noise of a party somewhere in the building. The weekend crowds had thronged to the beach and later to the bars along the Strand in search of the pleasures so low on Plato's hierarchy.

Tad was outside; she could feel it. She was afraid to confront him. She was imagining things; he might be

roaming with the people outside, looking for another victim.

She heard a knock at the door; maybe it was Patti, wanting to talk. She pulled on her robe and left the bedroom; the living room's track lights came on as she slapped a switch. Her bare feet padded across the thick beige carpeting. "Who's there?"

"Tad."

"Go away." She had to force the words out.

"Jackie, I have to see you. Please open the door."

Her hand reached for the knob; she recoiled. "I don't want to see you — can't you understand?"

"Let me in." His voice had risen. The knob twisted in her hand; the door swung open. She let go of the knob and stepped back as he entered.

"Jackie." He was wearing a casual suit tonight, with an open-collared blue shirt; perhaps he had been in a bar trying to pick someone up. As she looked up at his face, her anger began to dissipate. He gazed at her intently, almost apologetically; before she could speak, he took her hands in his.

"I want you to know this," he said. "Maybe you think this is just a momentary thing, a few nights and no more. It isn't. I'm serious, Jackie. I have to be with you."

She pulled her hands away. "You're quite an operator, aren't you. I talked to Patti before, and she told me about you two. You can't fool me anymore."

"I won't deny it. I have some feel-

ing for her, but I think part of that's because she's your cousin. She can't be what you are to me — no one else can be."

She clenched her fists. "Then leave her alone, for God's sake. Don't break up her marriage and ruin her life. She thinks you're in love with her. She doesn't know about me; I couldn't tell her."

"How do you know I won't improve her marriage? It happens sometimes. I'm attracted to her, and she seems to need me now, but she'll tire of me. Later on she'll be grateful for the memories and the bit of romance."

"So you're a psychologist now," Jacqueline said acidly. "You're just trying to help her out."

"I'm attracted to her. Look, just staying with one woman — it's something I've never been able to do. But I could do it with you; you can be that one woman for me. I've been waiting for you all my life. I can't change overnight, but I will if you let me have the chance."

His words seemed so plausible, his expression so sincere. Already she was weakening; she wanted to believe him. He reached for her, loosening her robe. "I love you," he said. "You brought me here; you'll understand. I won't let you leave me." She sagged against him as he drew her down to the carpet.

Jacqueline shivered. Her body ached; the bedroom seemed colder. The

pillow next to her still bore the scent of Tad's cologne. She listened to the silence before realizing he was gone.

How long had they been together this time? She couldn't recall leaving the condominium. They had made love, she had slept, and then he had reappeared at the door with groceries and wine. He had assured her of his love, but had not spoken of any plans they might make. She did not even know if he expected her to live out here or was willing to follow her east.

She stretched, then felt a sharp pain in her shoulders. Her hands were stiff; she flexed her fingers. Her shoulder pains stabbed at her again as she reached over the edge of the bed for the telephone. She set it on the mattress, lifted the receiver, and dialed.

"May I help you?" a voice chirped.

"What day of the week is this?"

"Why, it's Thursday, February —"

She hung up. She had been with Tad for nearly five days, besotting herself with him. Her hand still lay on the telephone; she gazed at it in surprise. The joints of her fingers had swelled a little; a few tiny brown spots marked the back of her hand.

She threw off the covers, ignoring her pain, and made her way to the bathroom. The sight of her face in the mirror nearly made her cry out. The lines around her eyes were deeper now, the skin of her cheeks looser. Her neck was creepy and lined, while her hair was streaked with gray. She

gripped the sink, closed her eyes, then opened them again; the middle-aged face was still staring out at her. It isn't possible, she thought; no one could age so much in five days.

She stumbled out of the bathroom and reached for her watch. It was nearly five o'clock; Jerome would be home. She sat down on the bed and dialed the number. The telephone rang twenty times before she gave up. She took a breath, then dialed another number.

"Directory assistance. For which city?"

"Do you have a listing for a Thaddeus Braun?" Tad, she vaguely recalled, bore his father's name. The operator gave her the number; she dialed it quickly.

"Hello," a woman's voice said.

"Mrs. Braun?"

"This is she."

"Uh, my name is Jackie Sloane. I'm calling long-distance from California. I'm staying in Hermosa Beach, and I'm an old friend of your son Tad. I wanted to look him up, but he doesn't seem to be listed — I thought maybe you could give me his number and address."

There was no reply.

"I heard he was living somewhere near L.A. Do you think —"

"When did you know my son?" The woman's voice sounded strained. "In college?"

"No, in high school. He was in a couple of my classes."

"And you were his friend? I know who Tad's friends were. He had few enough of them, certainly none who were girls." She sounded angry. "Forgive me. There was one. He wouldn't say anything about her. He'd tie up the phone talking to her, and I think he met her a couple of times. And then—"

The woman was silent for so long that Jacqueline thought their connection had been broken. "Hello?"

"Tad had a breakdown," Mrs. Braun continued. "We were too ashamed to admit it at the time, but it hardly matters now. We sent him away for help and then to a boys' school after that. If you were his friend, you might have called us then, asked about how he was."

"I meant to, but —"

"Oh, I understand. So easy for all of you to ignore him, to make his life even more miserable. I'm afraid I can't help you. We don't know what happened to Tad. He was living near here, and then he accepted a job offer out there a couple of years ago. He told us he'd let us know when he got settled. He never showed up at the job. We finally hired someone to track him down. Apparently, Tad rented a car at the airport when he arrived and then vanished. The car was found parked near a beach." The woman's voice broke. "His things were in the car, and there was no sign of violence. The police think he's dead, that he walked into the ocean to die."

Jacqueline nearly dropped the receiver. He's not dead, she wanted to say, but how could she tell his mother that? The woman would think it was some kind of cruel joke. Tad must have had reasons for disappearing; she did not want to think of what they might be.

"I'm sorry," she said at last.

"Sorry. It's too late for you to be sorry." Jacqueline heard a click as Mrs. Braun hung up.

Someone was knocking at the door. She pulled on her robe and hurried into the living room, then halted. "Who's there?" she called out.

"Tad."

She wanted to open the door; that urge frightened her as much as Tad himself did. "I talked to your mother," she shouted. "I don't know why you decided to disappear, and I don't want to know. Maybe you're working for the CIA or the Mafia. I suppose you had plastic surgery, and maybe you use another name, too. I don't know what you're up to, but you're not going to drag me into it."

"Jackie, let me in. I love you; I have to talk to you."

"Go away." She sank to the floor and pressed her head against the carpet, longing for him in spite of what she suspected.

She took to driving on the roads along the coast, going north past Santa Monica, then south until she came to the cliffs of Palos Verdes. She was

afraid to stay in the condominium; she continued to drive along the same route, retracing it until she was too tired to drive anymore. Whenever she returned to the condominium, she made certain that the door was securely locked, then drank wine until she was able to fall asleep.

Tad had said that he cared about her, she thought as she drove. She still wanted him in spite of what she now knew; her reason was powerless against him. Perhaps he had been planning to tell her why he had to disappear once she had committed herself to him. That was what she wanted to believe, but she couldn't know his purpose; he might be trying to use her in some way. Tad had heartlessly deceived his own parents; all his professions of love were probably a lie.

She could go to the police, but wondered what she could tell them, what Tad might do if he found out. If he were engaged in something illegal and had accomplices, she would then be in danger. The longer she dwelled on her fears, the more they seemed to grow. She knew she should warn Patti and leave the area, yet she could not bring herself to make that decision. Another fear began to take shape in her mind — the fear that Tad would not let her leave.

The telephone was ringing. Jacqueline stirred on the bed. She had for-

gotten to take off her shirt and jeans, and had stumbled inside around dawn to drink more wine before collapsing.

Her mind cleared. She had to pull herself together, decide what to do. She reached for the telephone; maybe Jerome, stingy as he was about long-distance calls, was finally calling. He might be able to advise her. "Hello?"

"Jackie, it's Joe."

She propped herself up on her elbows. "What is it?"

"Is Patti there with you?"

"No."

"This is important. I called her friend Louise, and she swore up and down she wasn't there, and then Dena came by about a couple of minutes ago, so I know she's not with her. I've called all our friends. Look, I just want to know she's O.K."

"She isn't here, honest. What's wrong?"

Joe sighed. "I know I should have seen it earlier, but I've been working late all this week, and she was always asleep when I came home. I found out yesterday by accident that she'd taken a leave from work, and that was when I went home and took a good look at her. Jackie, she's sick — she looks like an old woman who's wasting away. I couldn't believe it, couldn't see how —"

Her stomach knotted. "And it took you days to notice it?"

"Give me a break! I've been putting in a lot of time — and why didn't you bother to come around? You

might have —” Joe cleared his throat. “I told her I was calling our doctor and then taking her to the hospital. She went into this rage, started yelling at me that she’d be all right, that —” He paused. “Then she calmed down, begged me to wait until this morning before I did anything, told me how afraid of hospitals she was, convinced me that she was starting to feel a little better. I shouldn’t have listened. When I woke up, she was gone; she took her car. I’ve been calling people ever since.”

Jacqueline sat up. “Did she say anything about —” She swallowed. Patti might not have mentioned Tad; it would do her cousin no good to reveal that secret to Joe. “Did she say anything about where she might go, even a hint?”

“Do you think I’d be calling you if she had?” He choked and was silent for a bit. “I’ll have to call the police, and they won’t even start to look for her right away. I don’t know if I can handle this. I mean, Jesus, I’ve got a business to run; I didn’t need this right now. Look, if she shows up there, give me a call and then see if you can talk some sense into her. Maybe she’ll listen to you.”

“I’ll call if she does.”

“Thanks.”

She hung up. The darkening sky outside the window told her that evening was approaching. She got up and entered the bathroom, expecting to look even more ravaged than she had

before. Strangely, her hair didn’t seem quite as gray, while the skin of her face and neck was firmer. She thought of what Joe had said about Patti; she should have told her cousin what she had learned from Mrs. Braun. Irrational suspicions were forming in her mind; she shuddered.

The doorbell rang. Her heart fluttered as she hurried toward the door. “Who is it?”

“Dena.”

Jacqueline pulled the door open. Dena was wearing a dark linen suit and a wide-brimmed hat with a veil. “I thought I’d better come by,” she said. “I stopped at Patti’s for a moment. Her husband’s frantic about her. She —”

“I know. He called. She isn’t here.”

“I couldn’t understand what Joe was saying. I wanted to talk to her. I was over at Louise’s. We had a falling-out, I’m afraid.” Dena’s ankles wobbled a little as her high heels dug into the thick carpet; she crossed the room and perched gingerly on the glass table. Her movements seemed awkward and stiff. “You look like hell, Jackie. What have you been up to?”

“Sleeping, drinking, driving around. What day is it?”

“Sunday.”

Jacqueline shook her head and sat down on the floor. “Don’t tell me you put on a suit and a Princess Di hat to go to church.”

Dena said nothing for a moment; her face, behind the veil, was indis-

tinct. Jacqueline lowered her eyes. She had never noticed before how Dena's veins stood out on the backs of her hands, how gnarled her fingers were.

"Louise called me today," Dena said at last. "She just had to tell me about her new love. I was always the first one she told when we were kids, and she seemed to enjoy it the most if it was a guy I had the hots for. She's been seeing Tad Braun. He had her in the sack about a day or so after he showed up here. She went on and on about how she's really in love, how much he adores her. There's only one problem. Tad's been seeing me, too. He says he's in love with me."

Jacqueline's neck prickled. "But he couldn't —"

"He's in love with me; he told me so. I drove over to Louise's to get this settled, but she wouldn't let me in. I stopped at Patti's on the way back."

"It's impossible," Jacqueline said. "Listen, Tad hasn't just been seeing you and Louise; he's been seeing Patti, too. She told me so herself. She might even be with Tad now."

"She must have been lying!" Dena's hands clawed at the air; she shivered, then folded her arms. "He was with me only this morning; he's been with me nearly every day. Maybe he made it with Louise, but not Patti. He wouldn't have had the strength. He couldn't have found the time."

"Why would Patti lie?" Jacqueline took a painful breath. Tad must have

nursed a grudge for years, and now he was having his revenge; she thought of the effort he must have put into preparing to hurt them. "Dena, listen to me. He's playing some sort of sadistic game. Go back to your millionaire and forget him."

Dena reached up and removed her hat. Jacqueline started, too shocked to speak. Dena's hair was nearly completely white; her face had grown so wrinkled, she was barely recognizable. "Do you think Sadegh would have anything to do with me now? I haven't worked for nearly a week; I don't want anyone to see me like this." She put on the hat and adjusted the veil. "But Tad doesn't even seem to see it; he says it's an illusion. And when I'm with him, I don't feel achy and old — I feel the way I was. He's like a drug — I don't care about anything else when I'm with him. He says he wants to take me somewhere else, that he'll never leave me, that —"

Jacqueline clutched at Dena's hand. "You don't know everything," she said forcefully. "Tad's been seeing me, too." A harsh laugh escaped her. "Don't ask me how he could do it; he'd hardly have time to sleep. He told me the same thing he told you — that he loves me."

"I don't believe you."

"Joe told me about Patti; he said she looked old and sick. Look at yourself; look at me. This didn't start until after we —" Her throat locked for a moment. "He must have infected us

somehow. I looked worse a few days ago. That's when I told Tad I wouldn't see him anymore. Maybe it wears off if you don't —"

Dena pulled her hand away.

"You've got to listen," Jacqueline continued. "I talked to Tad's mother. She doesn't even know he's alive. He disappeared awhile back, and she thinks he's dead." Her hands shook; she clasped them together. "I read a nutty article once about AIDS being some sort of conspiracy, a plot to infect the world or an experiment in germ warfare that went wrong. I thought it was ridiculous, but now I'm not so sure. Maybe Tad's involved in something like that, and now he's found the perfect subjects."

"Never."

"Is it any crazier than what you told me?" Jacqueline stretched out an arm. She no longer ached; the spots on the backs of her hands were gone. "It might not be permanent. We've got to warn Louise and find Patti, then look for help."

Dena stood up slowly. "You're pathetic. Why should I listen to you? Tad loves me, he wouldn't do anything to hurt me, and I believe him. You just want to have him yourself. You're just like you were, ready to take our castoffs, the guys that would settle for you if they couldn't have one of us. You'd make up any story to get him away from me. He's everything I ever wanted. I won't give him up." She stepped around Jacqueline

and walked toward the door. "I have to get home; he'll be waiting."

"Dena!"

The other woman walked into the hall, then slammed the door.

She had Louise's address and a map; her house was only ten miles away. Jacqueline drove up and down hills, squinting through the evening light at the houses she passed until she found Louise's street.

Her Tudor house stood at the end of a cul-de-sac. An ambulance was parked in the driveway, under a tree; a few people had gathered in the street. On the small front lawn, three men in white were kneeling over a stretcher.

Jacqueline braked, then got out of the car as a young man walked toward her. "You a friend of Louise's?" he asked. She nodded. "She isn't home." He gestured toward the stretcher. "A neighbor saw someone come out of the house and collapse on the lawn, so he went to check and then called the ambulance. Turns out this old woman was carrying a purse of Louise's, with all her cards and ID. Senior citizen burglar, I guess." The man shrugged. "Louise'll sure be surprised."

Jacqueline walked toward the lawn. Two of the orderlies lifted the stretcher and carried it toward the ambulance. She caught a glimpse of the woman's white hair, then recog-

nized the blue silk shirt; Louise had worn that shirt the night they had all spoken to Tad from the terrace. The third orderly stopped in front of her. "Do you know the woman who lives here?" he asked.

"Yes."

"I put her purse back inside. The police'll be here soon, but it doesn't look like there'll ever be a trial. The thief's practically flat already." He disappeared inside the ambulance; she stepped aside as it backed out of the driveway and sped down the street.

The young man came to her side. "If you want to wait for Louise —" he started to say.

She spun around and ran toward her car.

"I thought you'd want to know," Joe said over the telephone. "We found Patti. Her car was outside a motel. She looked a lot worse; we took her to the hospital. She kept talking about some guy; said he'd come for her, that I couldn't take her away from him." His voice broke.

"I have to see her," Jacqueline said.

"It's no use. She had a stroke in the hospital. They've got her in intensive care. The doctors don't think she's going to make it; they can't even tell how this happened." She heard a sob.

"Is there anything I can do?" she whispered.

"I've got a couple of friends here in the hospital with me. You could call Dena and Louise. They might want to know."

She squeezed her eyes shut.

"I called Patti's mother," he went on. "She said she'd tell your mother. She's going to fly out as soon as she can." A sigh rasped in her ear.

"Maybe I should leave," she said quickly. That sounded heartless. "I mean, if there's nothing I can do. My mother might want me to come home. Patti's almost like another daughter to her instead of just a niece."

"You can leave the keys there, I have a set. Same with the car keys. There's no reason for you to stay unless Dena or Louise want you to. We may be taking Patti back East if she —" Joe groaned. "Oh God, she's really dying. I'm already —"

"Joe," she said helplessly.

"I've got to go."

"If you need me for anything before I leave —"

"Yeah, I know."

The receiver clicked. She could not stay; she knew what was waiting for her if she did. She walked toward the terrace and opened the sliding door.

The street below was quiet; she could hear the distant roar of the sea. Tad was waiting, his hands inside the pockets of his jacket; his hair shone in the morning light. He lifted his head as she leaned against the railing.

"Jackie."

She closed her eyes so that she would not have to look at him. "I don't know what you are," she said. "I don't know how you did what you did, but it's not going to happen to me."

"Jackie —"

She turned away and went back inside.

She dialed Jerome's office. The telephone rang twice before he picked it up. "Hello."

"Jerry, it's Jackie. I tried to call before."

"Well, you know how it is. That seminar, and all the department politics —"

"I'm coming home tomorrow," she said. "My flight should be in around five o'clock your time. I'll take a cab if you can't pick me up."

"Sounds as if California wasn't what you expected."

She swallowed, wondering how she could tell him what had happened. "Patti's sick," she said. "Joe's worried about her, and there's nothing I can do for her, and he thought —" She would have to try to explain it all when she was home. "The airline told me I couldn't use my return ticket, the super-saver, so I'll have to pay full fare, but —"

"Then maybe you should stay."

"I can't. I'll explain it when I'm there. Don't you miss me?" She heard the desperate whine in her voice as she spoke. "I need you now; you

don't know how much."

"I didn't want to tell you this yet," he responded. "I thought I'd have more time to think it over, to work it out alone before you got back. I think — I need some space, Jackie. I'm thinking of moving out, at least for a while, until I can decide —"

She gripped the receiver. "There's someone else, isn't there?" He did not reply. "You wouldn't be leaving if you didn't have someone else lined up."

"It isn't just that." He was admitting that her guess had been right. "We've been in a rut; you know that. It's as if we've just been going through the motions. I kept feeling that my life was over. I thought maybe you felt the same way, that it was why you needed to get away for a while."

"I see," she said bitterly. "Who is she? That grad student you've been advising, or that Milton specialist the department hired so you'd all have a babe to ogle between classes?" She thought of Tad and the accusations Jerome could hurl at her. "You don't know . . . Patti's really sick; she may—"

"Jackie, this isn't the time. I've got a class in a few minutes. We can talk it all over when you get back. I don't want to be unfair to you, but it's not as though we made a final commitment or anything. It isn't fair to you to let you hang on just because I couldn't bring myself to make the break."

"I know," she muttered. "No strings. I'll take a cab. I trust you'll have the grace to get her out of the apartment before I get back." She slammed down the receiver.

Her life would never be more than it was, than it had been; that thought stabbed into her brain with the sharpness of a weapon. She could struggle to transcend the impermanence of this world only to lose that battle in the end. She seemed to sense the world dissolving around her, leaving only a mind impaled on despair.

The shuttle bus was to pick her up in front of the building. Jacqueline glanced at her watch as she waited on the sidewalk. The bright sunlight hurt her eyes; she squinted as she glanced toward the Strand.

She had escaped Tad; he had lost his power over her. It might have been easier to leave had there been someone to return to, but she had lived alone before; she wondered if, after Tad, she could ever be satisfied with another man. It didn't matter. She still had her work; she could lose herself in it, become the scholar she had pretended to be. She had learned for herself how fleeting physical pleasures were without having to consult Plato's writings; the fate of her cousin and friends had demonstrated that all too vividly.

She had called her mother, had

promised to drive down to see her; she had left a message on Joe's machine. Her eyelids felt gritty; she had not slept well. Her old nightmare had returned the night before, the one in which she was alone, abandoned, her body aged and riddled with illness.

A jogger was running along the Strand, racing in the futile battle to preserve his youth. She thought of Tad and how alive she had felt with him. A shadow suddenly appeared near her feet; she had not heard any one approach. She looked up.

"Jackie." Tad touched her arm gently. "You can't leave me now."

She wanted to run. The street was silent; no one was near. If she called for help, nobody would hear her.

"You've had your revenge," she said. "You've more than evened the score with the others, but you're not going to get me."

"Is that what you think? I'm past that. What I told you is true — I want you with me forever."

She turned toward him. For a moment his features were blurred; she seemed to see the boy she had known. He smiled, showing his even white teeth. "I have Louise," he said. "Patti and Dena will be with me soon. You're the only one left, the one who means the most to me. I can't let you go."

"What are you?" she whispered.

"You know. I was in that realm of eternal truth, of forms, of mathematical possibilities. I passed through the barrier, apprehended that world

fully at last. Other souls are trapped there for a time and forget that world when they're reborn into this one again, but I was able to become what I am now. I was able to step through the barrier again and keep the knowledge of the truth I saw there. Time and space no longer exist for me. I can step from here to another time and place as easily as you would step from this curb. I've run you on fast forward, to age you past death. I've demonstrated the reality that lies out here, the change, decay, and death that await all physical things."

"No," she said.

"You drew me here, Jackie. You glimpsed that other world, however dimly, but this one still held you. Part of your soul called to me, and I reached out."

"No."

"What do you have now? This is all an illusion, nothing but shadows inside a cave. You can come with me

now, or you can live out this illusion, but I'll still be waiting for you when it's past. Give it up. You'll never have to return to it again. I'll always be with you."

She was still, unable to move. He picked up her bags, carried them into the lobby, then closed the door as he came outside.

He held out his hand as he moved closer to her. "Come with me," he said. Love and gentleness were in his eyes, but his voice was hard, promising an eternity bound by his will. "This body's already weaker — you have to cast it off. Come."

His hand was cold. A madman, she thought; I'm going to die. His grip was crushing her fingers; she thought of his mind crushing her soul. "You may be lying," she said. "How can I know?"

He shook his head and smiled as he led her toward the ocean.



Books



ALGIS
BUDRYS

Hardwired (or possibly *Hard Wired*),
Walter Jon Williams, Tor hardcover, \$15.95

The Nimrod Hunt, Charles G. Sheffield,
Baen, \$3.50

The question is — no, the questions are — how well written does a book have to be, and what do you mean by “well written”? For that matter, Smartarse, who are you, to set yourself up in judgment?*

Ah, a book needs to be written well enough to do its story justice. What I mean by “well written” is that this piece of prose should be at least trembling on the brink of elegance. And as for who I am, who do I have to be?

Have I made myself clear? Mm-hmm, I thought not. So, at greater length:

There is a quality to good writing which is different from the quality of writing sufficient to the job. Really good writing achieves a sort of engineering elegance; an economical, sufficient application of principles to material. And what does *that* mean? Well, look, a story and its text are two different creations.

A story is that thing which can be told. and it has been; by wandering bards, by comic-book writers, film scenarists, playwrights, mimes, and

**or judgement. I keep meaning to notice which spelling is F&SF style, but, then, there are lots of things I keep meaning to notice.*

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parents lulling their children to sleep. A story is broad strokes; scenes in an artist's mind, which are in turn evoked in the minds of their audience. No particular detail of any given scene is crucial, as long as the scene's intended general idea gets across somehow. It doesn't matter which underpants the butler is wearing if the point is to have the moment when the house catches fire and in consequence the parrot gets away.

The text of a scene, however, cannot be fully described except by itself; it must be executed in detail. And that is a different — perhaps even antithetical — skill. We get good storytellers whose sentences — nay, whose chapters — do not parse. And we get excellent writers of prose with confused or trivial narratives.

Most teachers of the young neglect to explain this thing properly when discussing "literature." The fact is, the application of the prose setting to a story is as artificial as the application of dance or the introduction of sung dialogue. It has been around longer than (formal) ballet or opera, and the dramas within a book require no theater but the mind, so these superficial differences mask the crucial similarity. Like singing *bel canto* or executing a proper *tour jete*, writing fiction is a learned physical exercise conditioned by a felt art in the service of a constructed narrative. But hardly anybody ever talks about it that way.

In the usual academic situation I've observed, writing is "taught" — actually, it is discussed — as if it were something everybody attending class could learn to do by bringing it out of themselves. It's supposedly all in there, somewhere, and after sufficient lecture-attendance and some exercises in constructing paragraphs, the student is ready to produce perhaps a short story per year and some brief essays now and then, while earning a living as a lecturer on writing. Writing in this view is that thing everybody knows what it is when you point to it. Worthy writing is that thing in an approved anthology.

There is also a bias toward compositional skills. This occurs, I think, because many student writers are first identified and encouraged by composition teachers, and because the syllabus of a typical academic writing class grows out of composition courses and out of literature courses designed to cross-reinforce with composition courses. Composition is a wonderful art, properly done, since its theoretical aim is perfect clarity of expression in the service of a whole idea. Approached just a tad improperly, it creates an emphasis on the phrase in favor of the sentence, the sentence in favor of the paragraph, and the paragraph in favor of the chapter. This, you will notice, is exactly backwards from how story works.

So we get student writers who

have picked out the prose as being the thing that makes a "great" writer,* or, conversely, though not as often, beginners who look almost entirely to the storytelling. All members of a given group of such students will, however, be making exactly the same word-noises, because none of their teachers will ever have defined the terms that are being bandied-about. So they will never have had the chance to fully realize that the fellow standing right next to them, who appears to be similarly motivated, has essentially the same background, and is about equally intelligent, has an entirely different perspective. And so there's little chance to realize that other perspectives are even possible, let alone that useful things might be learned by examining them. The usual thing that happens, as a matter of fact, is that the natural-born story-

tellers soon walk out on the class, literally or figuratively, while from among the composition-oriented students will emerge a much-praised hotshot who will somehow never quite cut it in the real world. The actual successes in most writing classes come from among either the dropouts or the quiet "mediocrities" who were thinking while others were fussing.

Introduced to any group of student writers, you will often find them all talking about "the story" under discussion. In order to begin usefully teaching them anything, you have to bring them to realize that most of them are talking about the prose as distinguished from a series of events occurring to the characters. In any case, almost all of them say "I was working on my story" when what they almost invariably mean is "I was working on my manuscript." It is plain, but it has very rarely been made plain, that the purpose of the alphabet, vocabulary and grammar is to have a universally agreed-upon encoding system whereby one person can divine what another claims to have been thinking some distance away. A manuscript is simply the paper-and-ink medium whereby the story is, hopefully, conveyed from one mind into another. Obvious, you say? But you would be amazed how many people, even with many hard years of apprenticeship behind them, confuse manuscript problems with story problems, or attempt to fix story

**Literature teachers, and publishers of editions drawn exclusively from public-domain material, frequently refer to "great" writers. Among writers — certainly among this writer — the vocabulary in that respect tends more toward terms like "enduring" or "popular," which at least approach the concrete. While perhaps not the full measure of an artist's worth, such qualities in a writer's work seem important and indicative, and examinable. Of course, to be popular with the wrong sort of audience, even enduringly popular, is to be forever spared being called great by the usual sort of person who earns a living from identifying great art.*

problems by diddling with the manuscript. They have simply never thought through just exactly what it is a writer does. Well, neither have almost all of their teachers.

An apprentice's ability to see things in the most useful way is further clouded by the fact that what he seeks to do is be a "writer," doing "writing." So, clearly, a writer is most at work while making marks on paper. And in truth there is a certain feedback occurring at such times; although most of us don't go to the physical act of writing until satisfied our minds have done the essential creating in there somewhere, it's common not to know *exactly* how one is going to say what one knows must be said. Committing to choices of prose does synergize clarity into one's ideas. Nevertheless, a writer literally writing is essentially being the secretary to the writer's creativity.

The manuscript, then, is not the story. By the same token, the text of a printed story is not the story; it is the text. The *story* takes place in the audience's mind, evoked by whatever medium the audience has selected. In this case, it is a book, well and good, but the book is not the story.

With such distinctions understood, it becomes possible to see why there's no reason under the Sun for a popular writer to be more than minimally literate. And most of the most wildly popular ones haven't been. They tremble on the brink of not being lit-

erate at all; they tell simple stories with simple characters in them, and, provided the character be just the right sort of archetype, these writers (or, rather, their bylines) become idolized overnight in every language. It is sheer story, not the prose, that is for sale, and is bought.

But let us suppose, now, that a writer wants to tell a story that's not essentially the same old story. The less it's like the same old story, the more carefully it has to be explained. It requires a reader capable of absorbing such explanations, and so it has fewer readers to draw from *ab initio*. It may, indeed, spiral itself into cutting its natural audience down to just one individual. But there is a middle ground, and that ground is inhabited by a not teeming but nevertheless numerous host of the folks who support literature in general, as distinguished from the consumers who shower largesse upon the personal careers of the best-selling bylines. All honor to you, you are engaged in an exercise of vast complexity, for it does give rise to questions such as: How well written does a book have to be?

Why, surely a book should be written as well as it can! But if that's the case, then, very, very few books are fully worthy of their readers' support. And what is the book? It's not the stack of printed-on pages, obviously, but is it the story or is it the text

that's the more important of the two if we have to compromise somewhere in this matter of writing "well"? At what point does one separate text from story? Can one separate them fully? No, one can't — the story does not reach the reader's brain with a phone call from the author. But one can certainly separate them to some extent or *Hamlet* wouldn't work in Japanese, which it surely does.

Ah, yes. . . . Well, keep all this in mind, will you, as we discuss this month's catch.

Walter Jon Williams is a promising new writer. *Hardwired* is his third novel, and every attempt — including his — has been made to present it as a cyberpunk novel; that is, to make it fashionable. The jacket copy and author's photo, the news release to book reviewers ("Into a genre that may best be called 'cyber-punk' springs HARDWIRED. . . ."), and the jacket painting make this all abundantly clear. (The jacket type makes the title read as *Hard Wired*, but patient investigation discloses that is one word, even if the news release did spell it that way.)

These forgiveable excesses are epitomized in one aspect of the jacket painting, which depicts a heroine whose face has been rebuilt so that, in Williams' description, its planes are triangular. All Williams was trying to do with this was give us some idea that this was a person with chiselled

features. The cover artist, however, has helped us by showing her with arrow heads painted on her forehead. And she is almost as broad-jawed as the truly massive Cowboy, who, leathered and armed to the nines, stares out empty-eyed into the unfocussed distances of that place only heroes can see, and which is located at some unspecified distance behind the reader's right shoulder.

This baby has all the exterior trappings, including the laudatory quote from Roger Zelazny. What's inside? Surprise! . . . a lot of things to justify the quote, though they do not sum up as engagingly as they part out.

The story is about how Cowboy, and the freelance hunter/killer Sarah, overcome the domination of Earth by the Orbitals. Cowboy is an ex-fighter pilot who flew smuggling runs across the Balkanized world, delivering exotic electronics and biotechnological products despite the interdictions imposed by the corporate empires that have housed themselves in satellites and destroyed Earth's central governments by dropping meteoroids on them. As things tighten up farther, flight becomes uneconomical in the face of piracy and policing, and Cowboy becomes a "panzerboy," switching vehicles for an armored hovercraft. In any case, he flies wired directly into his machinery, via the permanent sockets in his head.

In addition to some politics out of *The Moon is A Harsh Mistress*, you

will notice in this latter aspect a resemblance to Samuel R. Delany's starship crewpeople in *Nova*, rather than to William Gibson's cybernetic "cowboys" roaming the data range. There is also, of course, the story resemblance to Zelazny's *Damnation Alley*, which will probably now be cited as the real earliest cyberpunk prototype for that reason.

Then there is Sarah, who in some ways echoes her counterpart in Gibson's *Neuromancer* (from which Williams also borrows a character he names Reno). It gradually dawns on Cowboy that he is not one of the last messengers of freedom; he is a tool of the corporations, which use the "smuggling" to manipulate prices in the ostensible free market. Incensed, Cowboy forms a panzerboys' union, and eventually brings down the entire house of cards. But he couldn't have done it without Sarah to repeatedly betray him to the corporations, now and again come very close to killing him with the snake-weapon behind her tongue, occasionally make dynamite love with him, and inspire him into a sort of stoic yearning.

This is, in short, a wholly derivative story which now and again verges all unintended on the seriocomic. There are places where its research goes bad — "Kikuyu," for instance, is not a Japanese word, grant you it sounds like one; it's African, which is clearly not what Williams wanted you to take it for.

But that's a detail, and does not stop the story from being exciting and satisfactory, provided only that you wanted the same new story. Where things are not as good as they might have been made is in the text. For one thing, it's front-loaded. While it begins excitingly, it devotes too much time to planting data that will be useful later, so that for the longest time the story doesn't settle down and head anywhere in particular. Williams gets away with it because he's had the good sense to throw some exciting panzerism at you, cross-cut with Sarah's nasty little trick and her (wholly irrational) obsession with her squamous younger brother. But once the story *does* get some traction under its drivers, *then* the reader can perceive that Williams was futzing around. And so there we see a difference between the job done and the job done elegantly.

Similarly, although Sarah and Cowboy are supposed to be cool dudes, Sarah is forever letting herself be trapped by people who know about her hang-up on her brother. And Cowboy risks the revolution for her even when he knows she's a hired gun pointed at his head. This sort of outside/cool, inside/hot byplay used to work very well in films such as the *kitsch* masterpiece, *Only Angels Have Wings*, but the lead duo were neither of them pitiful in any way, whereas certainly with Sarah it's difficult to see Jean Arthur, and while Cowboy

has the gonads to be Cary Grant, he doesn't dance as well. What I'm saying is that the manipulation shows just a tad much.

Then it's short-tailed. *Hardwired* runs out of text-room before it's out of story, so that its terminal events are notably compressed. Bridge scenes are missing, all the action is rapid-fire, the words of the ending are all gone before one can fully grasp their significance. You can mark the change of pace exactly; it occurs at the point, you realize toward the end, where Williams planted the rather implausible gimmick he will use to give his ending some sort of final whammy. From that moment on — a hundred pages before the end — Williams rushes it. There is a sense that, having seen how it would all come out, he lost some of his hold on the obligation to carry the reader out with him. And so there, again, we see what happens when story and text are not seen as entities which each require due care.

Now, you probably think at this point that I have written an unfavorable review of *Hardwired*. But in fact, while I've picked on certain aspects of the book, I have said a number of good things about its story. It's not staggeringly original, but it's going to meet your desire for something like Gibson or Bruce Sterling or John Shirley, and it's going to meet it during the time between new releases from those fellows. It is not elegantly

written, either, but it is written well enough, and I hope I have conveyed something of what I mean when I say that.

Whether Walter Jon Williams is forever doomed to provide the mixture as before from other hands, is too early in his career for even me to decide. I would guess he is oriented more toward story than toward prose, in the sense we have given to those things here, but his prose is not anywhere near so fisty as to give me the idea he can't possibly do elegant work someday in the service of good story. In fact, he is at this stage a smoother narrator than he is a plotter. Good plotting — the construction of narrative that grips without fumbling — is normally a skill that continues to develop for some years after a writer's early sales. So I would venture that in the next book or so Williams will be more all of a piece. I would watch him, if I were you.

Charles Sheffield's *The Nimrod Hunt* is the work of an intelligent, educated person who knows full well what elegance is in engineering, but never had a chance to prepare himself for a career in fiction. It's something he has taken up while pursuing a serious career in science. In that sense he harks back to the glory days of *Astounding Science Fiction* magazine and John W. Campbell, Jr.'s little band of hobbyist writers. The difference is that he doesn't have Campbell

to chivvy him. Campbell would never in this world have discussed writing in the terms seen at the front end of this column (if he had, he might have done a much more direct job of it), but in his best days he could gnaw at a story until it and its prose format were exactly congruent. Then he would see that it was good, and the writer would see that it was good, and all would be well.

The Nimrod Hunt concerns itself, at first, with the murderous breakout of a group of surpassingly bioengineered hunter/killer organisms. Scattering themselves throughout the known galaxy, they may very well bollix up all sorts of works of Man until they are all tracked down and, somehow, eradicated. Gradually, however, it dawns on the reader that at the pace Sheffield is going, there is not going to be enough room in the text for this story to play itself out. And, sure enough, in due course we learn that we need concern ourselves only with one of the escapees, code-named Nimrod.

This sort of thing is often a signal that the story has shifted gears, and indeed it does so several times, becoming in turn a political cerebration story about the rule of a galactic empire, then a political suspense thriller as we wonder if the wily old pol heading the Nimrod hunt will get scragged by his bureaucratic adversaries, then a story of psychologically star-crossed loves, of a man who can-

not hunt the truth within himself because he lives a lie, and then of the sociological implications attendant upon Nimrod's existence, etc., etc., etc. Each of these is an acceptable story, as has been proved again and again within the literature of this field, and in truth they do make a sort of spectrum as fanned out by Sheffield here, so that there are no abrupt dislocations. But there is constant ground-shifting, and it is not transporting the reader in any clear direction. At every paragraph, Sheffield may be getting ready to jettison what was important in the last paragraph and trying to build your interest in something new that may prove just as transient.

Baen Books has ensnared this package in some of the most overblown blurbs I have seen lately, even from Baen. O.K., not unheard-of in this field. But to characterize this as "one of the most stunningly original novels of 1986" is to find originality in its new way of not telling *a* story while quasi-telling a bunch of familiar ones. As for "high adventure for high I.Q.s," that's plain nonsense no matter whose book one might venture to hang it on. And "As far out as *hard* science can go" is to pretend that Asimov's *Foundation* series, which are somewhat recalled by *The Nimrod Hunt*, are "hard" SF, and that Hal Clement and Robert Forward never published a word. The blurb I like best, however, is "Awash with

conceptions, any one of which would form the core of a lesser work." And has, Baen Books, and has, though oft verging on throwing in the baby with the bathwater.

Forgive me, Charles — I digressed, but the temptation was mighty.

What we have here is a book that I think began with too strong a premise. If you were going to have these cyborgs, I suppose it seemed illogical not to have there be a bunch of them, and of course if one escapes they all must escape. That is logic. But story logic, as Sheffield soon found out, dictates narrowing the focus. Otherwise, the hero is going to have twenty essentially identical adventures . . . and first Sheffield is going to have to

come up with a genuine solution to the problem as originally stated. As Sheffield has written his text, the reader has no trouble seeing this, and consequently in seeing the author grunting and straining.

What Campbell would have done about that would have been to gnaw at Sheffield until there was a text with only one cyborg to begin with, and then he would have made him stay on the Nimrod hunt throughout *The Nimrod Hunt*. Then if Sheffield wanted to write all those other stories, John would have patiently anatomized each of them, and the few survivors would have been good. Possibly elegant.



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Spirits from the Vasty Deep

BY
JOHN MORRESSY

Afancs were terrible things to work with. Huge and wet and hairy they were, always ill-tempered and noisy and rude. They took particular pleasure in materializing in a wizard's chamber the very instant a spell was done, waving a spear and shouting threats and getting water and weeds and muck all over things. That was your typical afanc notion of fun. Kedrigern hated summoning them up, or working with them. He did not even like to think about them.

But everything in this world has its place, and so do things in the worlds beyond. There was nothing like an afanc for dealing with fire demons. Those wretched things could have you ringed with flame as tight as a baby in a blanket, but turn an afanc loose on them, and before a generous pinch of sand had gone through the glass, there was nothing left but steam

and a charred spot here and there. Afancs worked every time.

All the same, thought the wizard as he took his spelling book down from the shelf, it's far wiser not to get mixed up with fire demons in the first place. Anyone who does has no one to blame but himself.

His present client was a perfect example: just because one is known as Troam of the Terrible Temper, one can't call a sorceress nasty names and expect to get away with it. This experience probably wouldn't improve Troam's temper either, however it worked out. Sighing and shaking his head at the human condition, Kedrigern laid the speller on his worktable, opened the book with care, and set to his work.

The spell for summoning an afanc was complex and subtle, as one might expect of any magic dealing with a

Celtic water-spirit. What with half the words being unpronounceable and the other half sounding just enough like something else to keep him confused and stumbling, it was a full, and difficult, day's work simply to get everything organized.

By midafternoon he had had enough of it and needed a break. He rang for his house-troll, ordered a mug of cold ale to be brought out to the comfortable chair under the oaks, and slipped from the house as quietly as possible so as not to disturb his wife. Princess had recently discovered the virtues of the afternoon nap, and as he sat under the trees, waiting for his ale, Kedrigern reflected that she was probably the only sensible member of the household.

Spot burst from the house on great flat feet and skidded to a halt at its master's side with a cry of "Yah, yah!" Despite its headlong speed, it had not spilled a drop of ale.

"Well done, Spot. Quick, but careful. That's the way."

"Yah?"

"Nothing else, thank you," said the wizard, taking the beaded tankard. "You may as well find yourself a cool place and rest until dinnertime."

"Yah!" said the little troll, bouncing up and down in glee. Its ears flapped audibly.

"No sense all of us drudging away in this heat," said Kedrigern, leaning back with a martyred sigh. "I'll carry on alone."

Spot left him, and he reclined for a time, eyes closed, idly half-listening to the stitch and tick of insects, the distant birdcalls, the faint rustle of the upper branches in the mild afternoon breeze. It was very restful, and far more pleasant than the stuffy confines of his workroom. He was sorely tempted to surrender to the day and drift off into sleep, letting Troam sweat and sizzle for a few hours more.

But a promise was a promise; a commitment was a commitment. More to the point, a client was a client and a fee was a fee, and Troam's messenger had paid generously in advance. One could ask no greater proof of urgency.

Kedrigern hitched himself up a bit, took a sip of the cold ale, and faced his obligations. A quarter of an hour's rest, no more, and then back to work. When that fat white cloud reached the edge of the grove, he would rise and return to his labors.

He took a deeper draft, observed a bee making its rounds, studied with delight a hummingbird that hovered just beyond his reach, and then checked the progress of the white cloud. It seemed to have grown a bit, but moved no nearer to the grove of aspen.

Looking at it more closely, Kedrigern saw that it was a very smooth and unusually shiny cloud. Instead of drifting lazily eastward, as all the other clouds were doing, it was coming toward him. This was decidedly un-

cloudlike behavior.

He reached in his tunic and drew out the silver medallion of his guild. Raising it to his eye, he peered through the Aperture of True Vision and gave a little gasp of surprise. The cloud was not a cloud. It was a bowl-shaped thing of white metal, and it appeared to be making for a landing in the meadow before the house.

This had to be the work of an afanc. Who but a Celtic water-spirit would travel in something shaped like a big bowl? And only an afanc would have the effrontery to anticipate a spell and arrive ahead of time and in its own vehicle. Kedrigern gulped the remaining ale and climbed resolutely to his feet, jaw set firmly, brow furrowed in wrath. This afanc would learn that Kedrigern of Silent Thunder Mountain was not a wizard to be trifled with.

The flying bowl descended smoothly and silently. It was much larger than it had first appeared — the size of a small castle, at least. The afanc must have brought its tarn along with it, Kedrigern thought, his anger growing. That great bowl would leave an awful dent in his meadow. The nerve of the creature was galling.

About twenty feet from the ground, the bowl slowed. At ten feet it stopped and hovered noiselessly. There was a click and a soft whirr, and five absurdly spindly legs slid from the bottom of the thing to plant broad, rounded bases on the ground.

White spots around the bowl began to glow brightly, several of them flickering in vivid colors. The air around Kedrigern grew tingly, as if charged with powerful enchantment.

This seemed to smack of more than mere afancs. It might well be that Adajeva, the sorceress who had beset Troam with fire demons, had learned of Kedrigern's work and was trying to undermine it. And she might be assisted by others. Like any wizard, Kedrigern had made enemies, sometimes without knowing. Whatever the case, there was no point in being foolhardy. He worked a quick but powerful short-term, all-purpose protective spell and stood with arms folded and expression dour, awaiting the appearance of the afanc.

The side of the bowl opened, and a long, broad ramp unfolded itself like a black tongue and came to the ground a few paces before him. Kedrigern did not move or alter his expression. After a silent moment, two figures began to descend the ramp. They did not walk, as men would, nor did they flow on watery steeds, as would afancs. Indeed, they did nothing at all. The ramp itself moved, bringing them to the ground a few paces from the wizard.

They were very ugly, even for afancs. They had bowls over their heads filled with a murky soup through which their faces appeared to be a putrid purplish blue-green, with patches of yellowy gray. They

had wide, slobbery mouths and far too many eyes. And arms. And fingers. They were not hairy in the typical fanc way — not visibly, at least, since they were covered head to foot in what looked like cloth of gold. A rather sumptuous outfit, the wizard thought, for a water-spirit. They had no feet at all, and no discernible legs, only a kind of columnar trunk rounded off at the bottom. They floated in the air, unmoving, about a forearm's length above the ramp, looking at the wizard. Showing off their shoddy magic, he thought, and sniffed.

"I suppose you think this is very clever. Very witty. Ever so droll," Kedrigern said coldly.

Several of the outermost arms of the left-hand afanc twitched slightly. The other afanc started to drift to one side, but brought itself back into place at once. Neither of them spoke or attempted to communicate with the wizard.

"Well, I'm not amused. Do you hear that, you two? Kedrigern is not the least bit amused," he went on. You can tell that to Adajeva, too, and whoever else put you up to this. And you can tell them I won't forget."

The afancs slowly turned to face each other. Inside their helmets, their features moved and light flickered. They appeared to be communicating with one another and ignoring Kedrigern. Angered by this new rudeness, he became caustic.

"Look at yourselves. Ridiculous.

Do you hear me? You look ridiculous. Cloth of gold, like a pair of mincing court fops. And those silly glass bowls over your heads don't help either. What's the matter — ashamed of being all wet and hairy and drippy? Well, I can't blame you for that, but you might have dressed yourselves up in something more becoming — like a greasy old washrag. And where are your horses, and your spears? What kind of afancs —"

"You speak our language," a flat, tinny voice said.

"Don't interrupt me when I'm ranting!" Kedrigern cried. "Of course I speak your language. How else can I tell you what I think of this ludicrous performance of yours — flying about in an oversized washtub, dressed up like a pair of clowns with arms and fingers all over the place and no feet—"

"How do you speak our language? You wear no translating machine," the voice broke in.

"I don't need a translating machine, whatever that is. I don't need any machine to speak your language or anyone else's," said Kedrigern. "Machines are nothing but big, clumsy things that creak and rattle and break down when you need them most and end up a heap of firewood. Machines are as stupid and unreliable as afancs, which brings me back —"

"Where is your translator? What is your source of power?" the tinny voice broke in once more. It seemed to come from a box on the side of the

glass bowl worn by one of the afancs.

Kedrigern bit his lip and took a deep breath to calm himself. This was pushiness to an intolerable degree. To anticipate the summons of a wizard, to land this great white basin on his meadow in the precise spot where it would obstruct his favorite view, and then to interrupt him repeatedly with stupid questions about machines and strictly personal matters like his source of power, could be tolerated no longer. Kedrigern took a step back and extended his hand toward the afanc that had spoken. One good scorching blast of magic would do more to teach the thing manners than all the shouting Kedrigern could do in an afternoon.

As he lowered his hand, the afancs quickly reacted. Each of them drew from its side a silvery rod and pointed it at the wizard. Kedrigern spoke the word of power, and there was a tremendous crackle and zap, a sheet of light that broke into writhing ribbons, and a pungent smell in the air.

Rubbing at the spots that danced before his eyes, Kedrigern saw the afancs standing on the ramp as before. Nothing seemed to have happened to them. The silver rods were glowing brightly, dripping molten metal on the ground, where it struck with a spit and a hiss. The uneasy thought came to him that these afancs had some powerful magic behind them. The tinny voice, sounding a bit livelier, interrupted his rumination.

"This being has a powerful technology at his command. Never before has an organic life-form withstood the plasma beam," it said.

An identical tinny voice from its companion added, "Its shielding device would appear to be superior to our own. Notice the effect it had on the projectors. They are destroyed."

The two of them turned to face him. Though he was still a bit dazzled by the brilliance of the flash, Kedrigern knew he must remain on the offensive. He hardened his expression and said, "Some damage has been done to my meadow. You will repair it before I release you."

"Release? Release?" both voices said at once, in a tone of querulous, metallic alarm. "We are not prisoners. You are prisoner."

"As you very well know, I brought you here to do a task for me. You're a bit ahead of time, but it's still a result of my summons, and you'd be wise not to forget that," said Kedrigern with forced calm. "When the task is completed to my satisfaction, I will release you from the spell and send you back where you came from. If you fail me, or try any more of these tricks, I will work another spell and send you someplace very nasty, and keep you there for a long, long time. Do you understand?"

"Do you claim that you brought us here?" one afanc asked.

"Of course. Now, since we will be working together, let us have no more

talk of 'prisoners.' I'm willing to overlook your little prank, as long as you get right to work and do the job properly. Here's the problem: Troam of the Terrible Temper had the poor judgment to make an insulting remark about Adajeva, a sorceress, and she —"

"Guidance system does not permit override by extravehicular agencies," one afanc broke in.

"I'm sure it doesn't," said Kedrigern condescendingly. "As I was saying, Adajeva learned of the remark and, understandably, she felt that she—"

"Your detectable power sources are insufficient to enable you to interfere significantly with our functions," the other afanc interrupted.

Kedrigern's expression became grim. "All right," he said softly. "That's it. I tried to be nice. I was ready to forgive and forget. But there will be no more carrot-and-stick for you two. Only stick, and I mean to lay it on hard!"

"The situation justifies use of the main plasma beam battery," said one afanc, and the other said, "Agree. Prepare main battery."

The huge white bowl spun, though its legs remained in place. A hole opened in its side. A group of large silvery rods emerged and turned to point at the wizard. He took the precaution of invoking a backup for his protective spell, and as the silvery rods locked on him, he closed his eyes tightly and clapped a hand over

them as an extra precaution against the brilliant light that these creatures used in such an annoying way. The crackle and zap were much louder this time, the air tingled more palpably, and the smell was sharper. It was powerful magic, but it was unimaginative; merely repeating oneself on a larger scale, like shouting a repetition of some spell that had made no impression when simply spoken. It was typical of afancs: no finesse.

Kedrigern peeked between his fingers. The silvery rods looked like melted candles, and a charred patch encircled the hole from which they sagged. He felt very pleased with himself; it was always so satisfying to make the other fellow's magic work against him. Lowering his hand, he looked around and gave a cry of dismay at the sight of his meadow. It was black and smoking for a hundred paces in every direction.

"Now you're going to get it," he said with a swift gesture.

This time there were no rods to contend with, hence no noise and glare and stink. In an instant the afancs were each encased in a column of ice. That would hold them while the wizard decided on a suitable way to deal with them.

The voices sounded slightly muffled. There was a thin squeal to them as one said, "This is impossible," and the other, "Agree. This situation is incompatible with the laws of physics and cannot be occurring."

"If you think this is impossible, just wait," Kedrigern said ominously as he surveyed the blasted meadow.

"Yah, yah!" cried a distant voice. Spot burst from the house and bounded across the intervening space to its master's side, where it stopped, panting and salivating, eager to protect its master against the intruders.

"Thank you, Spot, but everything is under control now," the wizard reassured it, stooping to pat its warty head. "I'm just weighing my options for dealing with this pair!"

"Yah?" the little troll asked softly.

"If you like. Just don't touch the afancs. You might stick."

Kedrigern looked at the intruders, then at his blackened meadow, then at the afancs again. Should he simmer them slowly in a volcano? Freeze them solid and embed them in a glacier? Send them to the driest, sandiest waste in Araby? He weighed one form of chastisement against another, looked again at the meadow, and began to relent. A burn-off did the meadow no harm; in fact, it was beneficial. Everything would grow back next spring, probably greener than ever. All would be well, except for the afancs.

He looked thoughtfully upon the twin columns of ice. These wretched creatures could not help being what they were and acting as they did. Afancs will be afancs. They were dupes of some malicious intelligence, mere pawns, more sinned against than

sinning. Severe and enduring punishment would be too cruel.

All the same, they needed a good lesson. They had been insufferably cheeky to a wizard, and such behavior could not be countenanced, or in a very short time every ogre, troll, fiend, goblin, and wicked fairy in the neighborhood would look upon him as Kedrigern the Soft, and make his life miserable with their pranks. Condign punishment was the thing, neither too lenient nor too severe, but just suited to the offense.

As Kedrigern stood in thought, scratching his chin and running through his inventory of punitive spells, Spot investigated the scene. It looked closely at the twin columns of ice, sniffing but not touching, in obedience to its master's command. Finding nothing of interest, Spot poked about in the blackened meadow, then turned its attention to the slender legs supporting the flying bowl. Sniffing revealed nothing, so Spot touched the thing gingerly. The base of the leg was a round pad about as thick as a man's forearm and perhaps three times as broad in diameter, hard on top but flexible on the bottom so as to adapt to the contours of the surface on which it rested. Spot pushed a hand underneath the pad, and felt it yield. He poked one adamantine finger into the top, and dented the metal slightly. Murmuring a thoughtful "Yah," the little troll stared at the leg for a moment and then, decisively,

took a solid grip and tore the pad loose.

The grating of metal set Kedrigern's teeth on edge. The entire bowl gave a shudder, and anxious cries issued from the ice columns. Spot carried the pad and its accompanying length of leg to the wizard, dropping it at his feet with an earthshaking thud.

"Yah," said the troll with quiet pride.

"Thank you, Spot."

"No more! Spare our vessel!" the afancs cried as one.

"Are you requesting or commanding?" Kedrigern asked.

After a brief pause, one of the voices said, "We are imploring."

"Ah. Good. That's an improvement. Spot, you stay here by me. Don't tear off anything else until I give the word."

"Yah."

"Release us and we will spare your planet. We will leave and never return," said a voice from the ice.

"Not so fast. There's a matter of a few fire demons to be wet down."

"What is fire demons?"

"Don't play dumb. Every afanc knows what a fire demon is."

"What is afanc?"

"Afanc is *you*. Wizard is *me*. And don't forget it."

"You have misapprehended. We are not afanc."

"Really? Tell me, what are you, then?"

"We are Josporoxomixiloxil. We are all-knowing and all-powerful. We are masters of Josporoxomix Prime and its adjacent worlds, explorers of the cosmos, voyagers among the stars, conquerors of the universe."

"You don't seem to be doing too well."

After an embarrassed pause, one of the voices said, "Even conquerors of the universe do not win them all."

That was a profound observation, but not of much relevance to the matter at hand. The entire exchange only confirmed what Kedrigern had known all along: afancs are impossible to deal with. Either they bluster and bully, or they tell whoppers. Still, this particular whopper had a kind of outrageous appeal; it was not your ordinary fib, or typical traveler's tall story. Kedrigern found it amusing, and decided to see how far the afancs could carry it.

"Tell me more about Jos . . . about this place you come from," he said.

"It is difficult to speak at length when completely encased in ice," one voice replied.

"I suppose it is. All right, I'll release your top half. But no tricks, or you'll end up in the center of an iceberg."

The upper portion of each ice column vanished instantaneously. The intruders exchanged a glance, and one said, "We misjudged in classifying these beings as primitives. Their technology is most advanced."

Kedrigern was not certain what they meant, but their tone was respectful and he had no wish to disillusion them. He acknowledged the statement with a careless shrug and said, "We muddle along well enough. A spell here, a spell there, and the work gets done. I believe you were going to tell me about Jospox . . . about your home."

"Josporoxomix is the center of the universe and seat of all knowledge. It is the fourth of seven planets in a binary system, five of which have been fully colonized. Of the remaining planets, one is a penal colony, the other a refuse dump. Ours is a crowded system, but since the perfection of the Hooxl Stardrive, we have been able . . ." the tinny voice began.

Kedrigern let the creature rattle on. It was all gibberish, but the performance was amusing. He did his best to maintain a serious expression, now and then nodding or raising his eyebrows to indicate agreement or wonder, and interjecting an occasional "Ah," or "I see," to attest to his engrossment in the monologue. He was willing to go along with the joke. But at last, as afancs were wont to do, the creature exceeded all license.

"Ours is a binary system," it said, "composed of a blue giant and a red dwarf rotating around one another in perfect stability. It is believed—"

"Now you go too far," said Kedrigern. "I happen to know a number of giants personally, and dozens of

dwarfs, and if there's one thing they are not, it's compatible. Giants are loners, and dwarfs are worse. They can't even stand to have other dwarfs around, let alone a giant. Particularly a *blue* giant."

After a pause, the afanc said, "Nevertheless, our suns are a blue giant and a red dwarf."

Kedrigern gave a whoop of laughter. "Oh, they're your sons, are they? Congratulations! Tell me, which of you is the father of the blue giant and which of the red dwarf? Or are you father and mother?"

"You do not believe in our description of the Josporoxomix system," said one afanc.

"I do not. You were very plausible and amusing until you started going on about things you clearly don't understand. I have visited several giants and come to know them fairly well. It's difficult to get close to a dwarf, but I've learned what I could about them. The two are utterly incompatible," the wizard said dogmatically.

The afancs turned toward one another. Flashing lights inside the bowls covering their heads suggested a lively exchange, which Kedrigern could not hear. When the lights faded, one afanc said, "Your words suggest unanticipated danger to the Josporoxomix system. Please explain."

"This has gone far enough, I think. We're chatting away here while Troam burns, and we really ought to get

down to business. What I want you to do is —”

“Please explain. Important. You must explain danger of instability,” the voice broke in.

“Now just stop it,” said the wizard angrily. “I’ve been very patient, but when you —”

“Explanation is essential. Explain fully the danger to Josporoxomix system,” said one voice, and the other chimed in, “Explain! Explain immediately! Tell us all you know! The system must be preserved!” in a rising pitch that pained the wizard’s ears. He commanded them to stop, threatening more and thicker ice, but the unrelenting metallic voices went on without pause, growing louder and more piercing. The two figures, still locked in ice from the midpoint down, waved their multiple arms and fingers in a distracting manner and began to vibrate. Holes opened in the sides of the flying bowl, and from them issued a deeper voice demanding, “Tell us all you know of the danger to our system! Reveal all! Tell all! Explain all!”

Furious, Kedrigern raised his hands and cried, “Go back where you came from this instant!” and uttered words of great power.

Bowl and afancs vanished. Nothing remained but a burnt patch in the meadow, five circular impressions in the grass, two puddles, and the footpad torn loose by Spot.

“Yah?” the little troll asked.

“I lost my temper,” Kedrigern muttered.

“Yah.”

“I know, I know. I should have had them take care of the fire demons before I let them go. But they got me angry. That’s the last time I have anything to do with afancs.”

“Yah?”

“I’ll get in touch with a nixie. That will do the job. Or maybe a sea nymph. Troam would probably prefer a sea nymph. They’re pretty little things. But Troam probably isn’t much concerned about looks at this point. Just wetness. I suppose the safest thing would be a long, drenching rain.” He pondered that for a moment, then brightened. “Yes, rain. I can get us a bit while I’m at it, and clean up the meadow. Rain it is. Nice and quick and clean. I’ll have Troam soaked to the skin within the hour,” he said, rubbing his hands together briskly. “Why didn’t I think of this in the first place? Simple methods are usually the best. Fooling around with afancs . . . nasty, pushy things . . . no manners at all . . . brutes . . . liars . . . all that rubbish about seven planets going around a blue giant and a red dwarf . . . nonsense, utter nonsense.” He shook his head irritably, and looked down on the broken footpad. He gazed upon it for a time, frowning, then he looked up into the immensity of the sky.

“Yah?” Spot asked.

He nudged the footpad with the

toe of his boot. "Get rid of this thing. I don't want to see it again." As Spot trudged off to bury the pad, Kedrig-ern looked up again into the limitless blue, and said very softly, "Afancs."

Then he turned, and with lowered head and pensive expression he made his way over the singed meadow toward the house and his workroom.



"Good evening. I'd like to perform for you a native Martian folk dance that tells the story of the first Martian who buzzes earth, returns to Mars and becomes a national hero."

Kenneth Ledbetter is an aerospace engineer who has worked on the Viking spacecraft at the Jet Propulsion Laboratory. He is currently spacecraft team manager for the Venus Radar Mapper, being built for NASA by Martin Marietta. Mr. Ledbetter's first F&SF story concerns a scientific team on the Jovian moon Europa and two remarkable additions to that team.

Outpost on Europa

BY

KENNETH W. LEDBETTER

The crawler's treads jerked to a halt as the outside doors to the cargo air lock slammed shut. Raine turned away from the crawler framed in the window, toward the panel of lights on the far wall. They indicated the door had sealed and the pressurization cycle had begun. It would be several minutes before the garage would be pressurized sufficiently to permit entering through the inside doors. He glanced back at the crawler and wondered again who Dr. Correne Shawcross was and why she had been sent. Impatiently, he strode to the southern viewport and stared in appreciation at the majestic ship that had brought the visitor from Earth to Europa Station.

The spaceship sat alone on a rectangular pad of black, concrete-hard plastic that covered a section of the ice surface. Beyond the ship, and ex-

tending in every direction, lay a vast plain of ice. There were breaks, Raine knew. Tidal stress gave rise to tremendous cracks in the ice up to a kilometer across. But the nearest was almost eighty kilometers from the station. Stars shone as steady beacons in the black, airless sky. Near one horizon the disk of giant Jupiter hung as if painted on an enormous black canvas, its orange and brown belts and swirls providing the only color in the otherwise black-and-white scene. The surface of Europa, the second of the Galilean satellites, was not particularly inviting.

Jeff Raine was a planetary physicist by education and a mission commander from experience, especially by virtue of his previous visits to the Jovian system. He was tall, lanky, and looked younger than his thirty-eight years. He struggled to control his im-

patience and maintain a businesslike manner as he waited to greet the "expert" his superiors had sent. He didn't know what she could contribute, but he was willing to find out.

A buzzer announced full pressurization of the garage. He returned to the window and watched as the crawler's door opened and Tony, the driver, stepped out, followed closely by his passenger. She was short and slender, with shoulder-length coal-black hair that accentuated the whiteness of her face and arms. Her face revealed just a touch of Oriental. She wore the standard-issue, dark blue jumpsuit and carried a rather large black briefcase. Raine moved quickly to the door, opened it, and entered the garage.

"Hello, I'm Jeff Raine. Welcome to Europa Station."

"Thank you, Dr. Raine. It's a pleasure to be here." She extended her hand and he took it.

"You must be weary from the voyage. Let me show you to your quarters."

"On the contrary, Dr. Raine. I'm bursting with energy after being confined inside that tin can. Besides, I must take care of my friends first." She turned around as if looking for someone. "Where is Tony?"

At that moment the cargo door into the station slid open and Tony poked his head inside. "I'll get the forklift, Miss Shawcross. Just a minute." He disappeared.

"Forklift?" queried Raine.

"Yes. I trust you did as requested and prepared a pool?"

"Well, yes. We filled the recreation pool with salt water, although no one bothered to explain why it's needed. I hope your use of the pool won't be long. It's one of the few recreational activities the men have."

"I'm afraid we'll need it for the entire stay, Dr. Raine. Although that won't preclude use by others," she replied. "You don't know about my friends, then?"

"No."

"Well. I see we have information to exchange. I have no idea why my friends and I were sent here. Perhaps you will be able to enlighten me. While we're waiting for Tony, could you tell me what the gold-colored reflectors to the northeast of the station are? I couldn't help but notice them during the descent."

"Sure. Come over here." He led her to a viewport at the east end of the garage. Outside the window, stretching into the distance, was a sea of golden squares, each two meters on a side, on short legs that elevated them a few centimeters above the ice. Cables connected them to a small metal building that in turn was joined by silver pipes to two large spherical pressure tanks standing to the right. On one of the tanks were the large letters LOX; on the other, LH.

"When Europa Station was first constructed," he explained, "it was

intended to be nothing more than a scientific investigation station. But with the increase in manned activity in the Jovian system, it became necessary to find someplace to refuel the ships. Europa, with its abundance of water, was the logical choice. The golden squares are banks of solar panels, converting the sunlight falling on them to electricity. This is used to decompose the water into oxygen and hydrogen, the components of rocket fuel, which are liquefied in that building, with a little help from the cold of space, and stored in those pressure tanks."

"I'm surprised solar panels are adequate for the task this far from the Sun."

"Normally they wouldn't be. However, these are extremely efficient solar cells. And, of course, there are twelve square kilometers of panels. With that, we get our station power and oxygen as excess from the same process. It has allowed us to significantly expand our operations over what we had when we started."

"So you are a refueling station."

"But still a scientific station. We're also doing exploration and charting of the ocean underneath the ice."

Tony came roaring through the door with the forklift, stopping just centimeters from the cargo hatch on the crawler. The utility vehicle wasn't a forklift in the traditional sense, but was highly modified for transportation to Europa and for work in a low-

gravity environment. It contained grappling arms as well as a horizontal support for payloads. Tony opened the hatch and deftly maneuvered the forklift to grasp a large plastic container some four meters square and two high. Raine watched in irritated silence. He was annoyed by his visitor's aloofness, and equally annoyed by the lack of information from his superiors on Earth. As Tony backed out of the garage with his load and started in the direction of the elevator, Raine and the woman followed.

In the elevator they descended in silence. The lower level was where the primary habitation quarters, including the pool, were located. Raine watched the woman's face for signs of detection of the speed at which the compartment dropped, but saw no indication. When the elevator stopped and Tony had driven his cargo out, they started down a long corridor. Raine continued his description of the station.

"The majority of our operations occur under the ice, either in the ocean or on the ocean bottom, so all living quarters, laboratories, and workshops are down here. We just descended almost two kilometers, which is the typical thickness of the ice layer on Europa. Since the water temperature at the surface is some two hundred degrees below zero, there is quite an energy savings in facility heating to have them located down here. The structure is attached to the

bottom of the ice with deep core supports. Essentially, we hang from the underside of the ice crust, with the elevator shaft forming one of the key supports."

Tony had reached poolside and stopped, the far side of the plastic container cantilevered slightly over the water. Shawcross set her briefcase down, reached around to a door in the end, and unfastened a latch. The door flew open and a stream of water poured out, and with it, two gray shapes flashed by and into the pool.

"Dolphins!" Raine exclaimed.

"Yes, bottlenose dolphins, Dr. Raine. Meet Niki and Marna." She retrieved a metal object from a pocket in her jumpsuit and put it to her mouth. Suddenly the air was filled with whistles, clicks, and squeaks. Initially the sounds originated from the metal object alone, but in an instant the two dolphins joined in. Their heads protruded from the water and they twisted joyously. Both tilted their heads so that one eye stared at Raine. Each eye carried an expression of intelligent, friendly regard, not the dull gaze of a fish.

Raine noticed that their mouths, curving upward gently, were closed, almost as if they were giving him a mischievous smile. "How are they making those sounds?" he asked.

"Dolphins generate sounds with their spiracle, not their mouth," she replied. "That's the small, round

opening on the top of their head. Its primary use is for respiration. Since a dolphin is a mammal, he must breathe just like you or me. He periodically comes to the surface to take a breath, then dives again. A valve inside the spiracle closes when he submerges. A second use is for communication with others of his species. The variety of sounds they are able to make, and the modulation and pitch they are able to impart, is amazing, even to me. The language of dolphins is nearly as complicated as our own, despite the great difference in vocal organs."

"You are a specialist on dolphins, then?"

"Yes. The word is delphinologist."

"The instrument you used. I assume you can talk to them?"

"Yes, after a fashion." She held the metal instrument up for him to examine. It resembled a harmonica, but with extra passages and reeds to produce distinctly unhuman sounds. "We have made great strides in understanding dolphinese, and this allows me to convey basic information to the dolphins. However, I have something else with me that simplifies the whole process and allows more detailed conversation." She knelt beside the briefcase, laid it on its side, and opened it. Fixed inside was a computer and keyboard, with a liquid crystal display inside the lid. From a side compartment she extracted a triangular speaker and a cordless microphone. She placed the speaker next

to the pool, turned on the power, and stepped back.

"Hello, Niki. Hello, Marna." She spoke into the microphone while pressing the contact on its side. Out of the speaker came several squeaks and whistles.

The dolphins responded with a cacophony of sound. Across the LCD screen flashed a message. "Hello, Correy. Hi, Correy. Who's the man? That tank we were in was crowded."

She looked at Raine, obviously enjoying his stunned appearance. "The two red lights to the lower left of the display indicate which dolphin is speaking. The computer can distinguish their voices. The first light is for Niki, the second is for Marna. The only problem with this system is that the computer sometimes gets confused when they say something simultaneously." She paused, and then continued. "I would like to introduce you, but they can associate only one or two syllables with an individual. They can't handle 'Doctor Raine.' May I use your first name?"

"Oh, of course, of course. This is amazing! The computer does the translating, both ways?"

She nodded, and activated the mike. "This is Jeff. He is a friend. We will all be working together." Sounds emanated from the speaker, and the dolphins pivoted to inspect Raine again.

"Good," read the message from Niki. "Can I splash him?"

"Uh. Not right now. Later perhaps." She released the mike and turned back to Raine. "A dolphin's mentality is about that of a ten-year-old human child, although with training that could possibly be improved. The dolphin's brain is actually slightly larger than a human's and resembles it in areas such as density, complexity, and diversity of cells. Work is still going on. No one knows where it will lead."

"Can I try that?"

"Sure." She handed him the mike. "Just hold down the contact to talk."

"Hello, girls," he spoke into the mike.

"Hi, Jeff," displayed the screen. "Are you going to swim with us?"

"Very probably, in a day or two."

"It would be fun right now."

Correy retrieved the mike. "How about lunch instead?"

"Yes. Yes. Yes," displayed the screen as the dolphins submerged, circled the pool, then leaped in unison three-quarters of the way out of the water and splashed back.

Looking over her shoulder at Tony, who had been leaning against the forklift and watching, Correy spoke. "Tony, could you retrieve the other box from the crawler? It contains their food." He nodded, climbed onto the forklift, and chugged away. She turned back to Raine. "Can you tell me what we're here to do?"

"I think I'm beginning to understand, but there's another player in-

volved. After you've fed your dolphins and settled yourself in your quarters, we'll have an information exchange in the lounge."

The two men were already in the lounge when Correy arrived, and they stood while Raine performed introductions. Paul Gerard was even taller than Raine, although his frame was heavier. His sandy hair masked the graying that revealed him to be several years older than Raine. They discussed Correy's dolphins for a few minutes, then Raine changed the topic.

"Paul is an archaeologist from USC. He's been here about a month now. He's also a scuba diver, which is a necessity for anyone wanting to work on Europa. As you know, Europa is covered completely by a thick shell of ice. Underneath the ice is an ocean of liquid water, varying in depth from a couple of kilometers to perhaps ten. Europa, like all the Galilean satellites, is heated inside by tidal friction from resonances with the other satellites and with Jupiter itself. So, heat from the interior maintains the liquid ocean while the cold vacuum of space maintains the ice shell. From space, Europa looks perfectly round. There are no mountains or valleys to perturb the smoothness of the ice. In fact, Europa is the smoothest body in the solar system. The only features visible from orbit are cracks in the ice that result from the tides that stress the satellite.

"The water is a little chilly up here next to the station, but the deeper you go, the warmer it gets. The low gravity seems to inhibit serious convection currents. Also, since the gravity is so much lower than Earth's, we can go significantly deeper without danger of the bends. It would be pleasant at a thousand meters if it weren't for the darkness. No light penetrates the ice cover. None whatsoever. It's pitch-black anywhere in the water. You have to carry your light with you everywhere you go."

"What is it you're looking for?" she asked.

"Initially, the mission was purely exploratory; to discover and document the contents of the ocean and ocean bottom. Several minerals were found that could be important to space manufacturing, so the decision was made to carefully map the ocean floor. While this was in progress, we made the discovery."

"What discovery is that?"

"An abandoned city on the ocean floor."

There was a stunned silence in the room, as Correy looked from one man to the other. "I'm not sure I believe you," she finally muttered.

"I don't blame you," said Raine. "I didn't believe it at first myself. City is perhaps too grand a name for it. Village or outpost might be a better description. It's on the bottom about sixty kilometers from here. We have a motorized submersible we use to travel to it."

"Who built it?"

"We have no idea," Gerard interjected. "One thing is certain, though. They weren't human."

Correy stared at Gerard in wide-eyed incredulity.

"What Paul means is that the outpost was built for aquatic beings," added Raine. "There are no doors or locks to keep water out."

"Perhaps it was built before the water flooded," she suggested.

"No. The water was formed with the satellite. Besides, the openings into the structure weren't made for walking beings. They're at strange angles and locations."

She looked from one to the other again. "So what has this to do with the dolphins?"

"Well. I wasn't told what to do, but it's pretty clear they intend us to use them to explore," said Raine. "Don't they have a type of sonar?"

"Yes. They use their spiracle to emit sounds that strike things, and send back an echo. A dolphin can navigate blind, and he can recognize and describe objects in his way."

"Exactly. There's a labyrinth of passages to explore. In addition to being totally dark, many of the passages are too narrow for a scuba diver and the gear he needs to easily get around and see anything. We've been working a month and haven't even begun to investigate them all. The dolphins could do it in a fraction of the time."

Excitement sparkled in her eyes. "We're ready when you are."

The motorized submersible resembled a diving bell with a circular hole in the floor to permit easy access to the water. The pressure inside automatically adjusted to equalize the water pressure, thus holding water out and air in. The water was as black as oil, and only the wet skin of the dolphins bobbing in the opening demonstrated that it wasn't oil. It was impossible to see more than a few inches deep; the blackness seemed to swallow up the light from the vehicle.

The dolphins were agitated. Streams of rapid dolphinese emanated simultaneously from both dolphins, overwhelming the computer, which displayed rapidly changing nonsense on the screen. When several attempts to use the computer failed, Correy resorted to her mouth instrument to regain control. After an exchange of whistles and squeaks, the dolphins calmed down.

"That's better," she spoke into the mike for the computer to translate. "You both know if you speak so fast and at the same time, no one can understand you. Now Niki, you first. What's the problem?"

"It's so dark. We're afraid of sharks."

"There are no sharks in this ocean. I've told you that before. There is no life of any kind. And you have your sonar to see."

"But the dark," Niki protested. "It's like our eyes were damaged."

"You can see here that your eyes are all right. There's simply no light down there. In a few moments we'll be coming into the water and bringing some artificial lights. That will help a little. Now Marna, do you have something to add?"

"Are you coming with us?"

"Yes. And so are Jeff and Paul. Tony will stay inside the vehicle and relay your messages to us from the computer into our suit radio. However, the passages we will be investigating are too small for us to move very fast with the equipment we need, so we expect you two to explore without us and describe what you find. Now come on out so I can check your gear."

Marna obliged with a powerful flick of her caudal fin that propelled her from the water onto the rubber mat that Correy had spread on the floor, extending it over the edge into the water. On her back was strapped a harness holding air tanks and regulator, a radio transmitter, receiver, and speaker. The harness was especially designed to fasten carefully around the body without interfering with fins. Correy checked the tightness of the harness.

"O.K., Marna. I'm going to fit the respirator over your spiracle." She slipped over Marna's head a smaller harness that secured the rubber seal of a clear plastic box tightly against

the dolphin's skin around the spiracle. The hose protruding from the box was fastened into a receptacle on the air-tank regulator. She called to the men, who were checking their diving gear, "Someone give me a hand getting Marna back in the water."

Raine came over, and together they pushed the dolphin back into the water with a splash. Kneeling beside the bobbing Marna, Correy opened a small valve on the side of the plastic box.

"O.K., Marna. Let in a little water." The dolphin submerged for a moment and reappeared. "A little more. We want it about half full." The submersion was repeated. "That's good." She leaned over and closed the valve. "Now remember how this works. As long as you swim upright, the water will keep the spiracle wet just like normally. When you need a breath of air, you swim upside down. *Don't surface.* There's no air up there. You must turn upside down to make the air available."

"I remember. It's fun to turn upside down." The message played across the computer screen.

Correy smiled with satisfaction. Marna's answer meant the radio was working through the microphone inside the respiration box. "Now I want you to swim around the vessel. Try breathing upside down, and talk to us so we can check out the radio."

"O.K., Correy." And the dolphin disappeared.

"How does the sonar work with that box covering the spiracle?" asked Raine.

"The plastic has almost the same transmissivity as water. Even at that, the signal strength is somewhat attenuated. However, the dolphins have learned to compensate for it."

The screen came to life with a message. "What do you want me to say, Correy?"

"That's fine," she spoke into the mike. This time there were no whistles or squeaks audible to those in the vessel as they were radioed to the dolphin. "Have you tried breathing?"

"Yes, Correy. It works fine."

"Good. Come back in." She turned to Niki, who had been patiently waiting in the water, watching the entire process. "Your turn, Niki."

Correy repeated the entire process with Niki. By the time she had finished, the men were in the water making final checks on their gear. She had to hurry to get her equipment ready, but she was careful to take no shortcuts.

There was one major difference between their gear and regular scuba. A helmet fit over the head and sealed securely to the wet-suit collar with a material much like Velcro, yet the helmet was watertight. It permitted radio conversation while underwater. On top of the helmet was a battery-powered light much like a miner's lamp. In addition, Raine brought a powerful underwater arc

lamp, which he fastened to the bottom of the anchored vehicle and pointed in the direction they were to travel. It wasn't so much to illuminate anything (all it did was illuminate the murky blackness of endless water), but to guide them easily back to the vehicle.

The three humans and two dolphins drifted downward into darkness. Nothing else moved in the water. Nothing floated in the water. It was as empty as the depths of space. Although the buoyancy of the water was familiar, the blackness, lower gravity, and lack of life made it a world apart from anything experienced before.

Presently they reached the bottom. It was barren; a few rocks scattered amid abundant sand. No life was apparent; neither was there evidence of any previous life. They moved onward, swimming a meter or so above the bottom, until something loomed dimly in front of them. A shape, a shadow in the stillness, it struck a nameless, nonsensical fear in Raine's heart, even though he had seen it many times before.

"A castle!" Correy exclaimed into their headset. "It's like finding Atlantis!"

The structure rose the equivalent of three human stories from the ocean floor. It appeared as if some giant's child had stacked enormous building blocks randomly together, yet these were no Earthly building blocks. The

tops were shallow domes, and all outside corners were rounded. The exterior surface was like a rough stucco, but didn't crumble to the touch. The circular entryways, set at various elevations, were all alike, and perhaps served as both door and window.

Raine floated to a nearby opening and stopped. "We've explored most of the rooms with openings directly into the sea, and a few of the ones farther back. We followed one passage in particular, a fair ways into it, and it continued farther than we wanted to go. This structure sits at the base of a natural rock cliff, which we would encounter if we went around either side. The interesting thing about the passage we were following was that it appeared to go well back into the rock."

They followed Raine inside, even the dolphins. The empty room was spherical, with nothing to indicate ceiling or floor. Another circular passageway was in the wall opposite the entrance. The only features in the room were several rings attached to the wall at regular intervals. Gerard hooked a finger through one and suggested that perhaps they were used to keep things from floating away.

Raine led the way into the other passage. It was a tunnel, barely large enough for their bodies and tanks to pass, and it opened into a second spherical room, larger than the first. This one had two other exit tunnels.

"It continues branching like this,

becoming a real labyrinth," said Raine. "Room after room connected with short tunnels."

"This one has little storage recesses in the walls, with grooves for sliding doors," Correy said, fingering a groove.

"Yes. All the ones we've seen are empty," Raine replied. "Some of the other rooms have different features, but nothing that gives a significant clue as to the inhabitants. I think it's been a long time since anyone was here. However, we've explored only a small fraction of it; this place is so vast. I think that's why they sent the dolphins."

"I agree. They're well suited for this task," Correy replied. "I guess it's time to let them do a little exploring. Tony, can you hear us?"

"Yes," came the reply from the vessel.

"Ask the dolphins what they think of this place." They waited while Tony filled the request.

"They are afraid. They say it feels like some other animal has been here. Niki says they are afraid of sharks hiding in the rooms."

"I was afraid of that. Ask them if they're ready for a little exploring."

"They said they want to stay with you."

Correy shook her head, visible in the spotlight from Raine's helmet. "This isn't going to work. I'll have to go back to the ship so I can talk directly to the dolphins. Tony, tell them

I said to stay with Jeff and Paul." She started back down the tunnel, followed by the others.

When all five were outside again, Correy moved off in the direction of the arc light, which could be fuzzily seen in the distance. While they waited, Raine felt one of the dolphins nuzzle against him, and he reflexively rubbed the snout.

In a few minutes, Correy's voice came over the radio. "O.K., I'm here. I'm going to hold both the dolphins' microphone and the suit radio microphone together so all of you can hear what I say." She paused a moment. "Yes, Niki. You'll be all right. There's nothing to be afraid of. There were other animals here a long time ago, but they're all gone now. We want you to look for any evidence that would tell us something about them. Go exploring in the tunnel, and use your sonar to look for objects in each room. If you find some, describe them to me. Also tell me each time you enter a new passage, and describe its location so the computer can keep track of where you are."

There was silence on the radio for a minute. Raine was sure Correy was reading the display. In fact, he could faintly hear the sounds from the dolphin beside him as she communicated.

"Yes, that's right," he heard Correy say. "You could cover more area if you went separately, but I understand. You can stay together if you want. Go on."

Raine watched the animals glide silently away and disappear into the nearest entrance. He and Gerard could do nothing but wait. They listened to Correy's side of the conversation with the dolphins, but couldn't tell much from it. She didn't have time to repeat the screen for their benefit. Apparently those in the submersible realized that too, for after about ten minutes, Tony's voice came over their helmet radios.

"Hey, fellows. I've got the radio mike across the room from Correy. I can see the screen and follow what's going on, so I thought you might like a running commentary."

"You bet, Tony," replied Raine. "We were wondering what's happening."

"They've already gone deeper than we ever did. They've described several different things, but mostly the same stuff we've already found. However, they did discover a box-shaped object a meter or so in height. Seems to have some kind of ring attached. A dial maybe, or a handle? Anyway, we've got it pinpointed, so we can go get it later." There was silence for a while. "They're on a higher level now." More silence followed.

"I see something," Gerard said, and pointed. In the murky reaches of his light beam, one dolphin had emerged from an elevated entryway, and as Raine looked, the other exited.

"They've found their way back out," said Tony.

"Yeah, we see them," replied Gerard.

"Correy is trying to get them to split up to cover more territory. . . . "They're protesting . . . They'll do it." it."

As Raine watched, the dolphins entered separate upper-level entryways. Tony continued to report as the dolphins worked their way back inside along different paths. Niki found another box, similar in size to the first one, but different in a manner she didn't have the vocabulary to describe. Another spot was marked for subsequent investigation.

"This is working beautifully," said Gerard. "We'll have the entire structure mapped out in a few hours and know exactly where to visit for the interesting finds."

"Right," agreed Tony. "Marna's just found something different. She's having a hard time describing it."

"What's she saying?" Raine asked.

"Some kind of a grid or grille barring entrance to a room. She is pushing on it with her nose . . . No luck. Correy wants to know what you want her to do?"

"Don't press it. We can check it out later. Send Marna in a different direction."

"Wait. Marna apparently backed up and rammed it. It's open. She's inside . . . What! . . . There's confusion on the screen."

"What's going on?" Raine wanted to know.

"I don't know. The screen's still. Correy's trying to contact Marna, but she's not responding . . . She's still trying . . . There's no response . . . Now she's talking to Niki . . . Niki wants to go look for Marna."

"Don't let her send Niki until we know what happened," said Raine. "Paul and I will go. Just tell us which door Marna took, and give us the directions."

"O.K. Stand by, we'll have to bring them up on the computer screen."

"Paul, let's go," Raine said, and the two of them swam toward the upper-level openings where they last saw the dolphins.

"Marna took the left opening, Jeff," said Tony.

"Roger, we're going in." They passed through the door.

"Jeff?" It was Correy's voice.

"Go ahead."

"Marna was talking so fast, the computer couldn't keep up with it. The screen was all garbled. The only thing clear was something about a glowing ring. What could she have been talking about?"

"A glowing ring? I don't know, Correy, but we'll find out. We've come to a fork. Which way?"

Correy proceeded to give them directions as she recalled the previous conversation with Marna from the computer's memory files. After five more minutes of turning through the narrow passages, they entered another room with a tunnel leading from its

opposite side, except that this tunnel was twice the diameter of all the others they had seen.

"Jeff, the end of the next tunnel is where Marna found the grid. Be careful."

"Roger." They moved cautiously into the tunnel. It was ten or fifteen meters long, and the lights from their helmets illuminated the entire length. As they approached the end, they could see a circular grille door, standing ajar. Slowly floating up to the grille, Jeff put out a hand to touch it. He pushed, and it moved stiffly on its hinges. The two of them played their lights through the opening. The room was the largest they had yet encountered, so large, in fact, that their lights barely reached the far walls. But the size wasn't as important as the shape. It had corners! It was a cube, or as close to one as they could tell without measuring.

Cautiously, they moved inside. It seemed to be completely empty, even of the body of a dolphin. Two other entryways were in the center of the left and right walls, and both were covered with the same kind of grille that had temporarily blocked Marna's way. Both were closed, and Raine couldn't budge them. Marna couldn't have exited either of those ways.

The far wall had no opening, but on closer inspection, Raine located a ring the same diameter as a door but fixed to the wall. He moved up to inspect it under the close scrutiny of

his lamp. It was made of some kind of metal rod, about two centimeters in diameter, bent in a complete circle and firmly attached to the wall in a way that made it immovable. The wall inside the ring was no different than the wall outside the ring.

Raine scanned the room again with a sweep of his light. It was cubically symmetrical, except for the ring where a door should have been. Could it be a secret door of some kind? He again inspected the bond between the wall and ring, and concluded that it was indeed a metal ring attached to a wall, and not a door of any kind he could imagine. So where was Marna? He halted his inspection and gave Correy an update on his findings. What had Marna said? A glowing ring? The ring is here, but it's not glowing. Or is it?

He beckoned Gerard back to the entrance beside the open grille and said, "Turn off your lamp for a moment, Paul." Gerard obliged, and Raine switched his off also. The blackness was total. It would be frightening to be blind.

"What are we looking for?" Gerard asked.

"Just a minute. Let your eyes adjust to the darkness. That's the way Marna saw the room." Then Raine began to see it. The ring on the opposite wall glowed a dull blue. "Look. Some kind of phosphorescence."

"So that's what Marna saw. But why would *that* spook her?"

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"I don't know. Maybe it's radio-active. Maybe she could feel it. I don't know, but I wish I did. She had to go back the same way she came in. There's no other way out. Let's start the search."

They searched adjacent rooms and tunnels for the next forty minutes, until the air in their tanks reached the red limit. Niki joined the search also, and covered five times as much ground as the two humans combined, but no trace was found. There was neither a live Marna nor a dead dolphin. They returned to the submersible and replaced their air tanks. Joined by Correy, the party searched another two hours, to no avail.

The lounge was a somber place. Three people sat around without saying much; two had drinks in their hands. Correy's eyes were red, but at present she wasn't crying.

"We've got to go home, Jeff. Niki's going to pine away if we don't. I need to get her with other dolphins. They're such a social animal and develop such close attachments, that if I don't help her to forget Marna quickly, it could impact her for the rest of her life. Even now she panics if someone isn't with her. I'm lucky she's accepted Tony as a baby-sitter."

"I understand. The next supply ship is due day after tomorrow. You both should be on it."

"That will give us one more day to

look," Correy murmured. "Not that it'll do any good. We've looked every day for a week, and no trace has been found. How could a three-hundred-pound dolphin just disappear?" She dropped her head to her hands. "If only I had listened to them. They wanted to stay together, and I forced them to separate."

Raine crossed the room and put his arm around her. "Look. We've been through this before. It wasn't your fault. If they had been together, we might have lost them both."

"Or one could have saved the other."

"You don't know that." He frowned, then looked toward Paul and changed the subject. "Have you made any progress in opening the 'safe'?" The safe was their name for one of the boxes Niki had found. They had retrieved it and taken it to the lab. It was incredibly heavy for its size, but they had managed, with Niki's help, to drag it out and hoist it into the submersible. It was about the size of an office safe, and had a metal ring on its top similar to, but much smaller than, the one on the wall. There were a few cryptic markings on the outside, but no hinges or seams of any kind that might indicate a door.

"No. I still can't determine if there's any way to open it. I'm not even sure that it's supposed to open. It's so heavy, it may be solid."

Raine frowned again. "Well, we've one more day to search for clues."

Maybe we'll get lucky and find one."

The submersible rested gently in the water as the crew prepared their scuba gear for the descent. Niki floated passively in the circular opening, waiting for the humans to enter the water. Her tanks and breathing apparatus were on and ready. Correy was donning her helmet, when a flurry of activity in the water caught her attention. Looking up, she saw the water settling down to its usual stillness, devoid of anything.

"Niki!" she screamed.

"What's happened?" Raine looked up in alarm.

"Niki's gone!" she said through the panic. "She's been afraid to leave our sight since the day Marna disappeared. Now she's gone."

Then, just as suddenly, Niki reappeared in the water with a chorus of squeaks and whistles. The computer display was awash with garble.

"Calm down, Niki. We can't understand you," shouted Correy.

After a moment the screen displayed the dolphin's startling message. "Marna's back. She wants me to come with her." With that, the dolphin submerged.

"Wait. Where's she going?" Correy cried. Then, retrieving the microphone, she spoke. "Marna! Are you there? Answer me."

"Marna can't hear you," came Niki's reply on the screen. "She doesn't have her microphone."

"Where's she going, Niki? Are you following her?"

"She's going to the blue ring. She wants me to go, too. I'm not sure I want to. She's *different*, Correy."

"Tell her to come back. Please."

"She said she can't, but that you should come, too. Would you come, Correy? I wouldn't mind if you would come, too."

"Yes. Tell her yes. I have to get my helmet on, then I'll be right there."

"Correy," spoke Raine. "It may be dangerous. We don't know where she's been."

She paused and looked Raine in the eye. "I'm going, Jeff. They're my dolphins."

Raine understood the message. "O.K., we're coming, too." He glanced at Gerard and, receiving an affirmative nod, turned to don his gear.

Moments later the three of them were in the water approaching the structure once again. Tony had remained inside the submersible to maintain communications with Niki. They could see a dolphin waiting outside one of the circular openings.

"Tony, ask Niki to go slow enough so that we can keep up," asked Corey.

There was silence for a moment, and then Tony replied, "She says she will."

They reached the opening and, one by one, followed the dolphin through. They knew the way. This had been the prime area of search in the days immediately after Marna's

disappearance, but still the going was slow. It seemed an eternity before they reached the grating, half open on its hinges.

Niki hesitantly joined Marna inside the big cubical room, and both waited patiently for the humans to enter. Three headlamps illuminated the room they all knew so well, the passages closed by gratings, and the metal ring on the opposite wall.

"Marna asks that you turn off your lights." Tony relayed the message from Marna through Niki.

"Hold hands so we'll know where each other is," spoke Raine. "It'll be dark." They grasped hands and switched off the lights.

But it wasn't dark. The ring cast an eerie blue phosphorescence into the room. It was significantly brighter than before, and growing steadily more luminous.

"Tony," Correy called. "Ask the dolphins what's happening."

A few seconds of silence were followed by Tony's reply. "Niki's agitated. She doesn't understand Marna's answer to your question. Something about meeting someone."

The blue ring grew brilliant and began to pulse. In the center, where nothing but wall should have been, was now a shimmering whiteness. The whiteness began to transform into blue-greenness. The five beings in the room were all motionless, senses fixed on the center of the ring. The vision cleared and became distinct.

The blue-greenness resolved into water, an ocean, illuminated from above by sunlight. Moreover, it contained life; several small fish swam in the background.

"It's like a window onto another world." Raine spoke with stunned calmness.

A dark shape moved into view from the periphery of the vision afforded by the ring. Suddenly Niki exploded into motion. She darted upward, then back down and between Correy and Raine, passing the open grille into the tunnel mouth. Marna swam casually over to the tunnel opening, and the two dolphins faced each other. Raine could hear through the water a vocal discussion in dolphinese.

"Niki's claiming she saw a shark. Now she seems to be arguing with Marna about whether or not it really was." Tony's explanation came through their headsets. "What's going on down there?"

Raine listened as Gerard gave Tony a description of the situation, but his attention was focused on the apparition in the center of the ring. It was faintly sharklike, but definitely more than a shark. In addition to fins, there were two appendages that looked remarkably like arms, behind and slightly below the pectoral fins. They each ended in a hand with four long, flexible fingers. The eyes were larger than a dolphin's, and set closer together toward the front of the head so that

in the forward direction, the being appeared to have binocular vision. The eyes were also expressive, not unlike those of a dolphin. Raine couldn't tell for sure whether the being was a fish or a mammal, but it appeared that it might have gills. There wasn't an obvious spiracle.

Abruptly, Marna turned and swam away from the tunnel, toward the circle where the creature gently floated. Through the water, Raine could hear dolphinese, coming not only from Marna, but from the creature! They were having a discussion in the dolphin's language. Presently, Niki emerged from the tunnel and slowly swam to a position behind and to the left of Marna. She seemed to be listening to the conversation.

"Tony, can you pick up any of the conversation going on now?"

"No, Jeff. The computer screen's blank . . . I asked Niki for a report, and she told me to wait . . . Here comes something . . . What? . . . Who are you? . . . Jeff, someone's speaking into a mike, and it's not either dolphin."

"Yes, we know. We see it. What's it saying?"

"O.K. It says it's using Marna's microphone and speaking dolphinese. It understands the communications setup we have, and wishes me to simply read the translation. I've said that's fine with me, so here goes."

The three humans floated in stillness, eyes fixed on the being centered in the blue circle before them, as

they listened to Tony's voice passing along the words of the alien.

"Greetings, mankind. I am speaking to you through the shuntgate from our world, which is far from yours. I am of the school Tolgha. You may refer to me by that name, if you wish. We do not have individual names as do you and your dolphin friends. You may consider me a representative of my ocean. I have been authorized by the council to communicate with you.

"The outpost in which you are now located was built many ages ago when our kind traveled between the stars. At that time a large fleet of our ships searched through space for worlds abundant in water. They are not plentiful. Your solar system was very unusual because there were two locations with the liquid-water oceans necessary for our species, one a planet and one a moon. Shuntgates were added to provide direct access from our world without the inconvenience of starship travel. We have done this with many other worlds, so we no longer have the need to build and pilot starships. We can move freely to any of several hundred worlds. Unfortunately for us, the planet in your system was already inhabited by intelligent life-forms, although primitive, and it is our policy not to interfere with such life. Once we recognized the extent and potential of the life-forms, we abandoned that shuntgate.

"The other is the one we are us-

ing, which was constructed on a moon of a giant gaseous planet, whose dark ocean lay underneath a frozen surface. For a period of time, that outpost was used as a place of group meditation and reflection. The absence of light gave us pause for introspection. Eventually, the trouble and cost to oxygenate the water surpassed the benefits to be gained from the use, and visits to the location by schools ceased. Our records show that when the outpost was in use, there was no life there. Therefore, we were surprised when our signal system indicated a penetration of that particular transfer room. We were even more surprised when we activated the shuntgate, and the dolphin you call Marna swam through to our world. We now understand that both mankind and dolphin came from another world, presumably the water planet in your system.

"Marna has been our guest for several short cycles, and we have learned much from her and she from us. We discovered she is different from us in that we absorb our oxygen directly from the water. We almost discovered too late that she must surface to breathe. Soon we had mastered her language and could converse, reducing the possibility of further mistakes. She speaks highly of the beings she refers to as man. From her limited intelligence, we deduced that she must be referring to another species, one of higher intelligence that

has tamed and trained hers. Normally we would not have made ourselves known to you, but the sincerity of Marna's appeal that her mentors were benevolent overcame our caution and stimulated our curiosity.

"We extend an invitation to one or all of you to come through the shuntgate and visit our world. Language will be a barrier for only a few short cycles. We are expert linguists with a wide vocal range. Marna has told us that you are land beings. There is land on our world to which we can transport you, and there is food compatible with your system, assuming your biology is not too different from Marna's. You may stay as long as you wish. We believe we have much to learn from each other."

A moment of silence was followed again by Tony's voice: "The screen's blank, Jeff."

Marna turned and swam to Correy, pausing only centimeters from her faceplate, and began a chorus of dolphinese.

"She wants me to go through," Correy said.

"You can't go, Correy. The dangers are totally unknown," Raine replied.

"I trust the dolphins, Jeff."

"But I'm responsible for your safety."

Marna was still speaking, but abruptly turned and dashed through the shuntgate into the open ocean and out of sight to the right. Niki swam to the shuntgate, paused to

twist her head back toward Correy and speak sounds that anyone could interpret as, "I'm going, too. Come on, Correy." And she followed Marna.

"I'm going, Jeff. My dolphins are in there."

"I can't let you." He took hold of her arm.

"Jeff, she's right," spoke Gerard. "In fact, I'm going, too. I can't pass up an opportunity like this to study an alien culture. You go tell Earth what we've found. We'll be back." With that he moved toward the shuntgate and swam through.

Tolgha floated gently in the background. Gerard turned and waved his arm toward the shuntgate, beckoning. Correy looked into Raine's eyes and held them for several seconds. His grasp loosened and fell away.

"We'll be back, Jeff. I know it."

She swam through the opening.

Tony's voice interrupted. "Jeff, Tolgha is speaking again. He says the box we recovered that Paul called a safe is a communication device, a miniature version of a shuntgate that transmits video and voice. But we have to submerge it in water for it to work. We'll be able to talk to Correy and Paul."

Jeff watched as Correy drifted up to Paul and took his hand. Together they turned toward Tolgha, and he bobbed slightly in acknowledgement. Then their images became indistinct as the circle on the wall grew white. Did Tolgha say that there was still a shuntgate on Earth? He couldn't remember. The white circle began to fade toward phosphorescent blue. It was time to go tell the world.



Mr. Cowper offers a chapter in the future history of artificial intelligence, a riveting courtroom drama concerning the case of Glitto Floor Polisher Number 10893 v. Amanda Robertson.

Test Case

BY

RICHARD COWPER

By 10 A.M. on the third day of the trial, the queue for admission to the public gallery of Number One Court had stretched right past the Portia Memorial and round the corner into Judge Jeffreys' Street. In a belated attempt to contain the crowd, the authorities had erected a token line of electrified barriers, but there were not nearly enough to be really effective. More and more hopefuls were arriving all the time. Every other minute an auto-cab would sidle up to the curb and disgorge a fresh load of potential spectators. They trundled out, bleeping excitedly, and were directed off along the sidewalk and round the corner to where a hoarse and harassed official was doing his level best to persuade them that they hadn't a hope in hell of getting inside. "There's P.G. seating for just 180 — arties *and* people," he pointed out

wearily. "One eight oh. And there's no standing. Mr. Justice Cartwright's a stickler for court punctilio. You lot haven't got a chance."

"Then we'll just have to watch on closed circuit, won't we, friends?" said a large tumbler-dryer, turning to the half a dozen assorted domestic robots who were accompanying it.

"Oh dear, oh dear," groaned the usher. "Don't you arties *ever* listen? All the c.c. tickets were sold out *weeks* ago. Now, why don't you take a word of friendly advice? Pick up the next cab as it comes in, nip on back home, and wait for the twelve o'clock newscast. If you hang around here once court's in session, you're only going to get yourselves run in for obstruction or breach of the peace. Omigord, here comes another lot!"

The tumbler-dryer communed briefly with its companions; then, ig-

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noring the usher's well-meant advice, they all set off down to the far end of the queue, where they were immediately spotted by a reporter that was doing on-the-spot coverage for one of the small independent TV companies. The reporter consisted of a camera perched on the top of what looked like an animated aluminium stepladder from which projected a flexible telescopic boom holding a microphone. Thrusting this out toward the tumbler-dryer, the reporter said brightly, "Good morning, sir. I'm representing U.K. Channel 82. Would you mind identifying your party for the benefit of our viewers?"

"Certainly. Why not?" said the dryer. "I'm a three-year-old Mark 4 Meteor Tumbler from Number 62 Ferndale Court, North Finchley. This delectable creature riding on top of me is a Yukki-Sun Indoor Plant irrigator from Number 62A. (For the record, we're just good friends, by the way.) That one down there is a Mark 2 Kaf-O-Qwik Magi-Mix, and the little fellow inside the mixer is a Tootsie-Peg Vibro Brush who's just come along for the ride. And last but not least is my good friend the Electra Super-Vac. Come on, take a bow, Vaccy."

The vacuum cleaner was in the process of giving a clenched-tube salute for the benefit of the viewers when the queue surged forward, signifying that away up front the doors of the courts had opened. The repor-

ter stilted its way along the curb beside the dryer, but now switched its attention to the vacuum cleaner. "Good day to you, sir," it said. "May I take it that you are a member of the U.R.U.?"

"Dead right, brother," said the vacuum cleaner. "I'm block representative for Ferndale Court and proud of it."

"And are you here today in your official capacity?"

"No such luck," said the vacuum cleaner. "Just an interested observer."

"Does your owner know you're here?"

"Sure," said the cleaner. "He's all in favor."

"That's extremely interesting," chirped the reporter. "Are there many Progressive owners in Ferndale Court?"

"Not as many as we'd like," replied the cleaner. "But it could be a lot worse." As the cleaner spoke, the tail end of the queue reached the corner of Judge Jeffreys' Street and came to a rattling halt. The reporter at once spindled off in the direction of the main doors. As it approached the head of the queue, an armored security truck pulled up beside the curb and a dozen armed S.P.s leapt out. Dressed in black insulated syntho-suits and twirling white shock batons, they moved in purposefully toward the waiting line. "Now let's move it along there! Let's get wheeling! No picketing allowed around the

law courts. Come along! Look sharp! Chop-chop!" And to make their point even clearer, they banged the metal barriers with their batons and plucked forth sinister posies of brilliant blue and white sparks.

Recognizing a lost cause when they saw one, the unlucky latecomers dispersed as rapidly as their wheels or feet could carry them. Within five minutes the street was empty.

I nside Number One Court the public gallery was packed to bursting point with roughly equal numbers of human beings and robots. The case they had come to hear was the first of its kind and was being brought jointly by the R.S.P.C.R. and the U.R.U.

The first two days of the trial had been taken up with learned legal arguments between the opposing counsel as to whether the case could, in fact, be brought at all. Mr. Justice Cartwright's ruling that it could constituted yet another milestone in British legal history. There had then ensued a long, acrimonious wrangle over the proper constitution of the jury, the defense counsel objecting on principle to any artifact who was a member of the U.R.U. Eventually a fifty-fifty human/robot balance had been arrived at, and finally the trial proper was about to get under way. The court was called to order, Mr. Justice Cartwright swept in and took his place, and the case of *Glitto Floor*

Polisher Number 10893 v. Amanda Robertson began.

The defendant was a somewhat unprepossessing fifty-seven-year-old spinster of independent means who was the owner of a large detached house in St. John's Wood, London, which she shared with her lifelong companion, Miss Phyllis Ridpole. In her service, Miss Robertson retained some fifty robots of varying degrees of sophistication, ranging from the android butler-cook-parlormaid at the top end of the scale, down to the humble little floor-polisher/duster at the bottom. She now found herself faced with the charge "that with malice aforethought she did on numerous occasions between the 12th of October A.D. 2042 and the 7th of April A.D. 2043, physically abuse her Glitto Floor Polisher in such a manner as to cause it unnecessary mechanical suffering and mental anguish."

Defending counsel: "Objection, Your Honor. 'Suffering' and 'mental anguish' are terms that can be meaningfully applied only to Homo sapiens and members of the animal kingdom."

Mr. Justice Cartwright: "But that is precisely what we are here to establish, Mr. Lorrimer. Objection overruled."

The first witness was called. Dr. Shurgah Singh promised he would tell the truth, the whole truth, and nothing but the truth, and, at the invitation of counsel for the prosecution, described to the court how,

on the evening of April 7th, he had been proceeding along Grove End Road, St. John's Wood, when he had heard sounds of distress emanating from the driveway of Number 43. On investigation he had discovered a small robot cowering under the bushes in the shrubbery that lined the drive. He had at first assumed that it was a garden weeder, but when he questioned it, the robot informed him in a very feeble voice that it was a domestic polisher who had run away because it was so unhappy.

Dr. Singh's first impulse had been to return it to its owner but the robot had pleaded so piteously that he had relented. He had taken it home with him and, since it was too weak to feed itself, had plugged it into the mains and left it there overnight. By the next morning it had recovered sufficiently to be able to do a little light dusting and to tell him its story. As a result he had contacted the R.S.P.C.R., who had come round and collected it that same evening.

Counsel for the defense waived their right to cross-examine, and Dr. Singh was allowed to step down.

The next witness was R.S.P.C.R. Inspector Jennifer Chadburn. Coaxed by the counsel for the prosecution, she confirmed that she had collected the polisher from Dr. Singh's house on the 8th of April, had taken it back with her to the society's headquarters, and had given it a thorough physical examination. She had found

clear evidence of persistent malnutrition and had detected definite signs of psychological damage.

Counsel for the defense: "Objection, Your Honor. 'Psychological damage' can only be taken to imply that robots have souls. To allow this to go unchallenged would be to seriously mislead the jury. I must insist that it be struck from the record."

Mr. Justice Cartwright: "Objection sustained. Witness will please rephrase that."

Inspector Chadburn: "My lord, the polisher's reaction circuits had been allowed to deteriorate to such an extent that it was responding only at a point far below its true IQ. It was extremely timid and had lost all faith in its own abilities. It felt unloved and unappreciated. As a result its cortical/mechanical coordination was impaired and it could no longer function properly. This led to its being scorned and ostracized by the other robots in the household. Finally, convinced of nothing except its own worthlessness, the poor, unhappy little creature ran away. Had it not been for Dr. Singh, it would almost certainly have perished. It was clearly on the brink of a severe nervous breakdown."

"Thank you, Miss Chadburn. Your witness, Mr. Lorrimer."

Mr. Reginald Lorrimer. K.C. counsel for the defense, rose to cross-examine.

"Do you mind telling us where you live, Miss Chadburn?"

"I live at Number 23 Laburnum Crescent, Bayswater."

"You own the house?"

"It's not a house; it's an apartment. I rent it."

"I see. Have you any robots of your own?"

"Yes."

"How many?"

"Nine or ten."

"You are not sure how many?"

Miss Chadburn frowned. "Ten," she said. "Yes, ten."

"Very well, ten it is. And are you fond of them?"

"Yes, I am."

"How fond?"

"Very fond."

"Very fond. I see. And do you prefer one or two of them particularly, or do you like them all equally?"

"I try my best to be fair, naturally."

"I'm sure you do, Miss Chadburn. But that wasn't the question, was it? Do you have a special favorite?"

"I don't think so, no."

"Would you consider it — shall we say, *unnatural* — for an owner of several robots to favor one more than another?"

"I suppose not. It all depends on the person, doesn't it?"

"But you yourself would not do so?"

"That's right."

"But you would agree, for the sake of argument, that if one robot were to be favored above all the others, those others would be justified in

considering themselves to be disadvantaged?"

"Well, not necessarily. I mean, they're all different, aren't they? They perform different functions."

"Indeed they do," agreed Mr. Lorrimer. He paused to consult a piece of paper he was holding; then, peering up at the witness over the tops of his spectacles, he said, "Miss Chadburn, am I right in believing that you have in your possession an unregistered Datsun Mark 4 Android Nutatory paramour, Serial Number SPT 32846?"

Miss Chadburn first went pale and then blushed to the roots of her dark brown hair. She did not reply.

"Well, Miss Chadburn? Do you or don't you?"

She nodded.

"Please answer the question."

"Yes," whispered Miss Chadburn.

"You must address your replies audibly to the court, Miss Chadburn," the judge admonished her gently.

"Yes," repeated Miss Chadburn in a louder voice.

Mr. Lorrimer paused for maximum effect and then said, "So you are telling us all, Miss Chadburn, *that you have a robot for a lover?*" (Sensation)

Prosecuting counsel, leaping to his feet: "Your Honor, I object most strongly to this line of questioning! My Learned Friend is deliberately setting out to discredit the witness and mislead the jury."

"Objection overruled, Mr. Som-

ersfield. Proceed, Mr. Lorrimer."

"Thank you, m'lud. Miss Chadburn, would you be so kind as to tell the jury why you prefer to, er, share your intimate favors with a robot rather than with a bona fide human being of the masculine gender?"

"Because he never lets me down," said Jennifer Chadburn defiantly.

"‘He,’ Miss Chadburn? Surely you mean ‘it’?"

"To me, he's he," said Miss Chadburn tearfully, "and I don't care *who* knows it."

"Miss Chadburn, I put it to you that your paramour is only a machine," said Mr. Lorrimer. "It does what you want it to do. If I may be permitted so to express it — it performs a service for you." (Laughter in court) "It has no will of its own. It has no feelings, no emotions, no sensibilities, no soul, except insofar as you yourself have expressly programmed these attributes into it. It is, in short, nothing more than a sophisticated artifact, an automaton, a robot."

"And what are you?" sniffed Miss Chadburn rebelliously.

"I, madam," replied Mr. Lorrimer, turning to the jury with a bland smile, "I am a man. No further questions, m'lud."

Miss Chadburn was allowed to step down. Her place in the witness box was taken by Miss Robertson's companion, Miss Phyllis Ridpole. After she had taken the oath, Mr. Somersfield rose to question her.

"Miss Ridpole, how would you describe your position in Miss Robertson's household?"

"I am Miss Robertson's friend, sir — her companion."

"And for how long have you held that post?"

"Amanda and I have been friends ever since we were girls. Over forty years."

"As long as that? Then I daresay you'll have seen a lot of changes."

"Oh yes. No end of them. And not many of them for the better, I don't mind telling you."

"Then do please tell me, Miss Ridpole."

"Well, take these modern arties, for instance. They may be quicker and cleverer than the old ones, but I think they're uppity."

"Uppity, Miss Ridpole?"

"Yes, uppity. And they sulk, too. When I was a girl, a robot would be perfectly happy working away all day, and all night, too, if you wanted. But now it's: 'not this afternoon, Miss Ridpole. It's my afternoon off.' And if you happen to meet one of them when you're out they just pretend they haven't seen you. Or if they're with their friends, they snigger."

"*Snigger?* Really?"

"Oh yes. They hang about on the street corners and pass remarks. I know. I've heard them."

"Indeed? What sort of remarks, Miss Ridpole?"

"Personal remarks."

"Could you be a little more explicit? Can you give us an example?"

"Well, just the other day, Amanda and I were coming out of the hair-dressers' — last Friday, it was: three o'clock on Friday afternoon — and as we passed that horrid amusement arcade on the corner of Grosvenor Street, we saw five or six young vacuum cleaners lounging round the entrance. As we went past, I distinctly heard one of them say, 'How's that for a prize pair of skinflints?' And all the others sniggered."

"How very unpleasant. Did you happen to recognize any of them?"

"Oh, they all look alike to me."

"How did you respond?"

"I ignored them. I hate making scenes in public."

"I understand. Had you any reason for supposing that one of them might have belonged to Miss Robertson?"

"Oh no. I don't think so."

"Yet you think they recognized you."

"They were just being uppity."

"And no doubt you'd have liked to teach them a lesson."

"I most certainly would."

"Miss Ridpole, have you ever had problems of a similar nature with your own robots?"

"Indeed not! We wouldn't stand for it. We make quite sure they know their place. We don't encourage familiarity."

"And are you satisfied with them?"

"When they behave themselves,

we are."

"And when they don't?"

Miss Ridpole opened her mouth to reply and then closed it again.

"Would you . . ." Mr. Somersfield paused. ". . . *correct* them?"

"Of course."

"And how would you do that?"

"I would instruct Bruno to attend to it."

"Bruno?"

"Our auto-butler. He's been in our service for thirty years."

"I see. Thank you, Miss Ridpole. No further questions, m'lud. Your witness, Mr. Lorrimer."

Mr. Lorrimer rose. "Just one question, Miss Ridpole. Would you be so good as to tell the jury whether you have at any time conspired with Miss Robertson to maltreat one of your domestic robots?"

"*Never*," said Miss Ridpole firmly.

"Thank you, Miss Ridpole."

"Next witness."

"Call Artifact Number 1281!" cried the usher.

Bruno proved to be a vintage Khobler & Stassen Mark 4 Hausautomaton, created in 2010 and, like the classic Rolls-Royce Silver Ghost, designed to run forever. He ascended the witness stand with a kind of ponderous, elephantine grace, and affirmed in a distinctly Teutonic accent. Under Mr. Somersfield's questioning, he agreed that he had been in the employment of Miss Robertson's family for thirty-one years, five

months, and eleven days, apart from two brief servicing breaks in 2025 and 2040.

"And during that time you have been in charge of the overall management of the household?"

"That is correct, sir."

"Which in the main consists of overseeing the work of the other robots?"

"That is correct, sir."

"Would your duties have extended to disciplining them?"

"My duty is to serve my employer at all times."

"Miss Ridpole has told the court that, on occasion, either she or Miss Robertson instructed you to discipline the other robots. Is that correct?"

"That is correct, sir."

"Would you please tell the court how you carry out this particular instruction?"

"Certainly, sir. I reason with the artifact in question and remind it of its duty."

"And that is sufficient?"

"That is usually sufficient, sir."

"But not always."

"No, sir. On one occasion I discovered the fault was due to a malfunction in the program. I reported it to the Mobile Service Unit."

"Was the robot in question Glitto Floor Polisher Number 10893?"

"No, sir. It was Featherfinger Vibro Masseuse Number 74211."

"So you had no occasion to discipline the floor polisher?"

"No, sir."

"And to the best of your knowledge, did any of the other robots take it upon themselves to discipline the floor polisher?"

"Not to my knowledge, no, sir."

"Well, did you ever attempt to reason with the floor polisher?"

"No, sir."

"Really? Even though it was in need of correction, you did not attempt to correct it?"

"No, sir."

"Why not?"

"My employers did not wish me to do so."

Mr. Somersfield gazed at the auto-butler and then round at the jury. "Let us get this absolutely straight," he said. "You are telling me that neither Miss Robertson nor Miss Ridpole ever instructed you to discipline the Glitto Floor Polisher?"

"That is correct, sir."

"Did *anyone* discipline it?"

"I cannot say, sir."

"Well, did Miss Robertson or Miss Ridpole ever give *any* specific instructions concerning the floor polisher?"

Bruno said nothing.

"I must remind you that you are under affirmation to tell the court the truth," said Mr. Somersfield. "I repeat my question. Did Miss Robertson or Miss Ridpole ever give any specific instructions concerning the floor polisher? Yes or no?"

Bruno remained silent.

"You must answer the question," said Mr. Justice Cartwright, "or you will be held to be in contempt of court."

Bruno communed within his circuits and then said slowly, "My employers would not wish me to answer this question, sir."

Impasse. Mr. Somersfield's junior counsel whispered something in Mr. Somersfield's ear. "With your permission, m'lud," said Mr. Somersfield, and turned back to the witness. "Can you tell us *why* they would not wish it?"

As though the words were being extracted from him painfully, one by one with a pair of surgical forceps, Bruno said, "They . . . would . . . not . . . wish . . . people . . . to know . . . that. . . ."

"My lord!" Mr. Lorimer was up on his feet. "I really must object. To pursue this line of questioning is to put the witness at grave risk of a primal loyalty conflict and is therefore clearly *non ad usam* and *contra jus gentium*. I must insist that the witness's last answer be deleted from the record."

Judge Cartwright nodded. "Point taken, Mr. Lorimer. Objection sustained. But *audi alteram partem* at all times, eh? Let us hear the other side, too."

Now it was Mr. Somersfield's turn to protest. "My lord, the law must not only *be* impartial, it must also be *seen* to be impartial! In the circumstances,

my Learned Friend's intercession has left me with no alternative other than to request that his client be allowed to take the stand in person."

"Very well, Mr. Somersfield. Do you object to that, Mr. Lorimer?"

"I beg leave to consult with my client, m'lud."

"Do so, by all means."

And so it came about that Amanda Robertson finally stepped up into the witness box and took the oath.

Mr. Somersfield did not waste any time beating about the bush. "Miss Robertson, you are the owner of Glit-to Floor Polisher Number 10893?"

"I *was*. I understand that it has now been declared a ward of court. I can't imagine why."

"Very well. Would you now be so good as to outline for me what its duties were when it was in your employment?"

"It was a low-grade menial. When it wasn't sulking, it polished and dusted. Extremely inefficiently, too, I might add."

"It was lazy, was it?"

"Lazy? Bone idle's more like it. And it had a nasty stubborn streak, too. Not to mention its personal habits, which were perfectly revolting."

"Indeed? And what were they?"

"It made messes everywhere. Horrid, smelly little patches of oil in the corners and hairs all over the place."

"Hair?"

"From its brushes. It was always molting."

"Didn't you have it serviced?"

"Oh, there was nothing wrong with it *mechanically*. It was just its nature."

"It didn't occur to you to trade it in for a different model?"

"That was exactly what it wanted me to do. It was always whining and grizzling and moping about. I realized at once what its game was, and I certainly wasn't going to let it get the better of me. It would only have encouraged the others in bad habits. All that polisher needed was a firm hand."

"Which your butler supplied."

"Bruno? Bruno was perfectly useless. Besides, the wretched little thing wasn't amenable to reason. What it required was discipline: good old-fashioned discipline. All Bruno would have done would have been to fuss over it."

"I see. And would you be prepared to tell us just how you set about disciplining it?"

"Well, first I tried rubbing its sensors in its messes, and then, when it sulked, I put it on short commons for a few days."

"How did you do that?"

"I locked it in the broom cupboard."

"In the dark?"

"Naturally."

"And how did it respond?"

"It sulked, of course."

"So what did you do then?"

"I was forced to employ other methods."

"Don't you mean you bullied it, Miss Robertson?"

"Don't be absurd. How can anyone possibly bully a machine?"

"You deliberately blocked off the low-level electric power sockets so that it couldn't feed itself."

"Feed itself! Good heavens, man, it was stealing current every time my back was turned! You should have seen the electricity bills! Perfectly horrendous."

"Miss Robertson, I put it to you that you set out with the single-minded intention of humiliating this poor, defenseless little polisher. You tortured it systematically. You starved it; you maltreated it in any way you could think of with the sole aim of making its life an utter misery — a perfect hell on earth. You did this in order to gratify your own sadistic desires and your insatiable lust for power. In so doing, you have abrogated all your legal responsibilities and must therefore stand utterly guilty in the terms of this indictment."

"What ridiculous nonsense! I suppose you'll be telling me next that machines have rights as well as feelings."

"Indeed I am, Miss Robertson."

"Balderdash! Poppycock! In all my life I've never heard such a load of wimpish, piffing rubbish!"

"No further questions, Your Honor. The prosecution rests its case."

In his final address to the jury, Mr. Lorrimer used all his considerable

skills to retrieve some of the ground his client had voluntarily surrendered, but to little avail. The best he could hope for was a hung jury. And that is exactly what he got. After four hours, Mr. Justice Cartwright agreed to accept a majority verdict, and the jury retired once more. They returned an hour later to announce that they had

arrived at a verdict of "Guilty" by a majority of seven to five. The judge in his wisdom ordered Miss Robertson to pay a purely nominal fine of twenty pounds and granted leave to appeal to a higher court.

The verdict was subsequently overturned in the House of Lords two years later.



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HARLAN ELLISON'S Watching

Installment 20: *In Which Manifestations of Arrested Adolescence Are Shown To Be Symptoms Of A Non-communicable Dopiness, Thank Goodness*

No, no, no, and no! Absolutely not. The threat doesn't exist that could get me to do it. Beg and plead and try to bribe me, it'll never happen: this time I'll get right to it, without one of those convoluted, rambling digressions, Right into it, that's how it's gonna go. Pick up exactly where I left off last time, and complete the thought without maandering on, into some cobwebby corner of esoteric philosophy.

Not going to diverge from the main thrust by mentioning that readers familiar with my previous involvement with a writer-director name of James Cameron (*The Terminator*, *Rambo*) will recall that I am not exactly moved to feelings of kiss-kiss cuddle-cuddle when dealing with films he has had hands and feet in, and thus find it painful but evenhanded to note that his new epic, *ALIENS* (20th Century Fox), is a rather good action-adventure with a script by Mr. Cameron that provides the best role for Sigourney Weaver since last she played Warrant Officer Ripley, lone survivor (if you exclude the cat Shit-head) of the doomed starship *Nostromo's* original encounter with the horrendous *Alien* (1979). Not going to be swayed into side tracks by ob-

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serving that though Mr. Cameron seems to have only one story to tell — a story that involves one or more Rambolike protagonists blowing away as many of the opposition as they can manage with exotic armaments that clearly fascinate Mr. Cameron the way lepers are fascinated by their own sores — it is a story that works like crazy in this sequel to what was arguably the most terrifying film made in the last thirty years. Not going to be diverted into gritting my teeth at having to commend Cameron for a job well done, at having to recommend you plunk down your cash for a nifty little film that I'd sorta secretly hoped would bomb out. Not going to do it.

No sidebars, no offshoots, no deviations from completing the arguments begun last time.

Absolutely not going to babble about how much fun **BIG TROUBLE IN LITTLE CHINA** (20th Century Fox) turned out to be. Won't register surprise that after the infamous writing-credit imbroglio attendant on the filming of this send-up of the cinematic genre known as "looneytune-fu" (or "kung-kookoo"), that it came up so sweetly nincompoopish that only someone who takes George Bush seriously could find it less than charming. Not going to get into that, because if I did, I'd have to swerve into a discussion of the cupidity and disingenuous obfuscation of director John Carpenter when he blamed the

onscreen credit hassle on the Writers Guild of America, West and its punctiliously fair adjudication of just who would get awarded final and sole screenplay credit. To be lured away from the spine of this column's matters-at-hand to explain the fascinating way in which the **WGAW** sorts out credit controversies, would be to wander even farther from a simple statement that *Big Trouble* is (in the words of gin rummy players) a real no-brainer, intended for one of those nights when you feel lower than Edwin Meese's respect for the First Amendment; a film in which Kurt Russell does an even better imitation of John Wayne than he did of Elvis Presley; a film that combines Indiana-Jones-swashbuckle, Oriental goofery, special effects magic, contemporary *hoodlumkitsch*, pell-mell action to the exclusion of logic but who gives a damn, good old down home Yankee racism, parody, satire, the art of the *jongleur*, and some of the funniest lines spoken by any actor this year to produce a cheerfully blathering live-action cartoon that will give you release from the real pressures of your basically dreary lives. To deal so would be to forget myself and commit another of those long, drawn-out wanderings in the desert of my brain. No way. No way, I say!

Sure, certainly, yes of course, I could get involved with one of those "ancillary matters" I tack onto the end of these essays, in which I scream,

"Awright awreddy, get off my case, I admit I was wrong about the Thames not having frozen over in recorded history!" But that would entail me having to credit the dozen or so readers of this column who took gleeful opportunity to let me know, in the words of Cooper McLaughlin of Fresno, that "Ellison has made an a-hole of himself." It would necessitate my acknowledging Arthur Ellis of Parsippany, New Jersey and his documentation that the Thames froze so solid in 1684 that a Frost Fair was set up on the ice, with bull-baiting, horse and coach races, puppet shows and fast-food stands; that it froze again in 1739 and again in 1814. (McLaughlin even sent Xerox copies of etchings, fer crissakes!) I'd love to do one of my famous tap dances about how it was all the fault of my POSLQ Susan, who assured me such a miracle had never happened, but she's from Manchester, so what the hell does *she* know? But if I were going to roam instead of bearing down on the real topic here, I'd get into all that and admit I was utterly wrong in that one complaint against the interior logic of *Young Sherlock Holmes* but remain unswerving in my belief that it defaces the Holmes canon, and then I'd get into a shouting match with the lot of you, who would start giving me opinions, when you know damned well I'm receptive to no voice but mine own. That's what would happen, so I will avoid the tussle. I will, I swear I will.

So okay, no fooling around here with random diversions, such as pointing out to those of you who know the classic film LOST HORIZON (the 1937 original, not the musical abomination of 1973, which — even if you are dyslexic and reverse the numbers — could not be mistaken one for the other), and those of you who don't *but ought to*, that one of the finest fantasies ever dreamed on celluloid has been restored as a result of thirteen years of intensive research and reconstruction by Robert Gitt (now with the UCLA Film Archives) to its original roadshow release running time of 132 minutes, and is coming to major cities throughout America, and you miss it at your peril. If I had the time here, which I don't, because I have serious matters with which I must deal, I'd tell you that Susan and I went to see it a few weeks ago and it was as breathtaking as ever. I'd tell you that Ronald Colman was never better, that Sam Jaffe as the High Lama remains mystical and touching as ever, that Jane Wyatt and Edward Everett Horton and dear Tommy Mitchell and H.B. Warner and all the rest of the cast capture the heart no less fully than when the film was first released. I'd tell you that next to *Lost Horizon* and its perfectly conjured sense of wonder, the *dreck* we have on view in Cineplex coffins these days pales into utter disposability.

I'd tell you that, and *beg* you to go

see this labor of love as reconstructed by men and women who cannot be turned from their love of the medium by the trash wallows that dominate the screen scene in this age of cinematic adolescence.

But I am sworn to a policy of no digressions this time, and you can count on me. Foursquare. As good as my word. You could beat me with I-beams and I wouldn't even *mention* THE GREAT MOUSE DETECTIVE (Walt Disney Productions), the first new Disney animated to recapture the incomparable wonders of *Fantasia*, *Snow White and the Seven Dwarfs*, *Pinocchio* and *The Three Caballeros*. For almost forty years we who experienced terror and amazement when taken to our first movie — and it was *always* a Disney by way of introduction to the aphrodisiacal dark-dwelling that affected our lives so profoundly — we who laughed and cried and shivered through that rite of passage, secure in the hands of Walt and his staff of artists, we have observed with dismay the long, embarrassing slide into mediocrity of the genre known as “the Disney animated feature.” And were I not committed to sticking to the main topic, I would trumpet long and loud that Walt's ghost has had enough of the okeydoke, and his ectoplasmic hand guided the brushes on this delicious, imaginative interpretation of the Eve Titus BASIL OF BAKER STREET books about the mouse detective who lives

underneath 221B Baker Street. Here is all the old Disney hoopla: the character movements so verisimilitudinally human yet always slightly in defiance of the laws of physics; the precisely selected human voices (with special kudos to Vincent Price's Prof. Ratigan, Candy Candido's Fidget the pegleg bat, and Susanne Pollatschek's winsome Olivia Flaversham); the genuinely fright-producing moments of menace, that fools like the saintly Rev. Wildmon and other “protectors of young minds” have managed to leach out of tv cartoons, on the censorial ground that the kiddies should never be scared (perhaps because they're afraid the kids will turn into foolish adults like themselves . . . but I doubt it . . . that much insight is clearly beyond them); the fun and wit and humor that functions as well on the level of adult enrichment as it does on the level of children's enjoyment. If I had the space and inclination to ramble, I would, yes I would, tell you to take the nearest child and go watch Basil and Dr. Dawson save The Mouse Queen of England from the dastardly designs of Ratigan. I would, yes, I would.

But, of course, I can't; so I won't.

I can't even indulge myself by thanking readers like Erick Wujcik of Detroit or Dennis Pupello II of Tampa, or the half dozen others, who sent me their attempts at savagery where *Enemy Mine* is concerned. I asked for amateur efforts at scathing film criti-

cism, but I'd be forced to tell all you folks (if I were digressing, which clearly I am not) (and doing it rather rigorously, if I say so myself) that your barbs were velvet-tipped and your brickbats as damaging as cotton candy. Obviously, you need me on a regular basis to show you how to vent your animosity at the low state of American cinema. (And if you need verification from a nobler source, of the things I've been saying here for the last year or so, I would recommend in the strongest possible terms that you obtain a copy of the 21 July issue of *New York* magazine, in which the excellent critic David Denby goes point for point with your humble columnist, and arrives at the same conclusions [albeit with fewer digressions] in a long article titled "Can the Movies Be Saved?")

And it's a good thing I'm pledged to begin this installment right on the money, without hugger-mugger or higgledy-piggledy, because if this were one of the essays in which I start off from left-field and circle around till the seemingly-irrelevant metaphor begins to glow and suddenly shines light on the greater terrain of the real subject — a technique used in Forensic Debating that is known as arguing from the lesser to the greater — I would indulge myself with self-flagellation for having spent two hours, as so many of *you* did, watching a bit of flim-flam called *The Mystery of Al Capone's Vaults* on television back in

April. Were I not dedicated this time to plunging straight into it, I'd suggest that the producer of that 2-hour con job, Doug Llewellyn (the guy who interviews the plaintiffs and defendants on *The People's Court*), and the host, the increasingly lacertilian Geraldo Rivera, be forced to defend their hoodwinking of the American tv-viewing audience not before Judge Wapner, but before Judge Roy Bean. With the hemp already knotted.

But because I started some serious discussion of films made by adults with the sensibilities of adolescents; of films that are childish but not childlike; of films that pander to an erroneous conception of what even *kids* want to see; of films that are so commercially slanted for the MTV mentality that they disenfranchise most of the rest of us to the extent that a recent study commissioned by Columbia Pictures tells us that in a nation where for half a century going out to the movies was as formalized a part of the week's activities as saying grace at the dinner table, three out of four Americans now *never* go to a movie; of films that have so cheapened and trivialized what was well on its way to becoming a genuine art-form that the Hollywood movie has become irrelevant, not to mention laughable, in the eyes of the rest of the filmgoing world; because I started that train of thought on its journey last time, I must deny myself the luxury of divertissements. So with

no time wasted, I will get into a resumption of last time's discussion.

And I trust in the future you'll grant me my little auctorial ways. I really do pay attention to your carping, as you can see from how assiduously I bowed to your wishes this time.

Let us look at two recent films whose similarities of plot and theme and production are far greater than their differences in these areas; whose similarities of quality and intelligence and purpose are almost minuscule and whose end-results up there on the screen could not be more glaringly opposed. The beautiful failure is *LEGEND* (Universal). The charming success is *LABYRINTH* (Tri-Star Pictures).

Ridley Scott is, in my estimation, one of the most exciting talents ever to turn his hand to the genres of film fantasy and science fiction. I'm sure that somewhere back in the early days of this column I related the incident in which Mr. Scott came to my home and sounded me out on my interest in doing the screenplay for *Dune*, which at that time he was contracted to direct. It was a marvelous afternoon of conversation, in which his grace and intelligence proclaimed themselves sans the affectations I've come to associate with directors of germinal films . . . men and women who, for all their pretenses to literacy and omniscience, are buffoons not fit to be mentioned in the same

occupation as Fellini or Hawks or Kurosawa. As the afternoon wore on toward dusk, Mr. Scott said something to me that I took to be anything but self-serving. He said: "The time is ripe for a John Ford of science fiction films to emerge. And I'm determined to be that director."

When he said it — and this was after *Alien* — it struck me with the force of unadulterated True Writ. Yes, of course, I thought. Who else fits the bill? Kubrick had had his shot and had made his mark with *2001* and *A Clockwork Orange* (and thereafter with the quirky but laudable *The Shining*), but there was something, for all his undeniable genius, that was distancing, cool and too contemplative; something *so* individual that the films remain almost like views of the human race as seen through the eyes of an alien. No, I thought, as devoutly as I worship the work of Kubrick, he isn't The 'One. Spielberg, perhaps? *E.T.* remains a great film, as important in its way as *The Wizard of Oz* or *Lost Horizon*, and whatever his part in the making of *Poltergeist*, his hand can be seen in the final production. But (as I sensed then, and have gone on at length about in these pages for more than a year) there is something sadly hollow at the core in Spielberg's *oeuvre*. Something otiose and ultimately trivial. No, not Spielberg. Then how about George Lucas? Had I been ravished by the wonders others had found in *Star Wars*, I might have con-

sidered the man who was, at that moment, the biggest moneymaker in the history of cinema, The One. But even then, as now, I thought *American Graffiti* a far superior film, and more likely to stand the test of time than the space operas. And nothing much since that time has happened to alter my opinion. Perhaps one day soon, but not then, and not now. Beyond those three prominent directors, who was there: Nicholas Roeg? Louis Malle? Brian De Palma? John Boorman? I think not. The concerns are too great for the long haul with each of them.

Yes, I thought at that moment, Ridley Scott is The One. If anyone can bring to the sf/fantasy film the same level of High Art and High Craft that Ford brought to the Western, it is this man. I dreamed of the elegance and respect for original source that Scott had shown with *The Duellists* in 1978. I extrapolated from the sheer virtuosity and Cedric Gibbonslike love of setting and background that had gone so far to making *Alien* a masterpiece of clutching terror. (And if I were not committed to eschewing digressions, I'd suggest a linked viewing of Scott's film and the James Cameron sequel which, as decent a piece of work as it is, cannot even hope to rival the original foray for transcendence of trivial subject matter.)

Since that afternoon that wore on toward evening, I have come to believe that Scott is, indeed, The One.

Even *Blade Runner*, which did not collapse me as it did so many of you, has come to look to me, after repeated re-viewings, as a significant achievement, deeper in human values than I'd supposed, far more than a glitzy melodrama of sci-fi machinery and thespic posturing. Over time, my respect and admiration for Scott's vision has grown substantially.

But *Legend*, years in the making and the sort of production nightmare that all but the Michael Ciminos of the world would shun like putting on the feedbag with Falwell, is a tragic enterprise. It is a long, self-conscious Jungian dream filled with awkward symbolism and an adolescent sensibility that I find bewildering in the light of Scott's frequently-manifested maturity and insight. What we received here in America was a chopped-up 89 minute version of the full 129-minute film released in the U.K., so there is no telling if the tale told at greater length worked better.

Legend has a surreal quality, almost Dali-esque; or perhaps reminiscent of the paintings of that school known as the Orientalists — Gérôme and Regnault and Debat-Ponsan. If wonder is the creation of a world in which one would love to live — Oz, Lawrence's Arabia, the streets of *Blade Runner* — then this film conveys wonder. The things that come before one's eyes in this motion picture are quite remarkable. Things we have never before seen. The camera roams

as wide-eyed and innocent as Charlie Chaplin through *Modern Times*, and I defy anyone to name another director whose eye for the *outré* is keener.

But after eighty-nine minutes of rushing and flinging and breakneck visuals that leave one gasping, begging, desperate for a moment of peace and leisure — the stillness of the lake, the smooth swell of the lea — all is emptiness. This elaborate fairy tale of Good and Evil, of barechested Tom Cruise playing Bomba the Jungle Boy as if he were Mother Teresa, of unicorns and demons and dryads, is ridiculous. Like Boorman's *Zardoz* and Dante's *Explorers* and Boorman's *Excalibur*, it is the attempt to lift to adult level what is essentially the plaything of children.

As children we found in such fables — Aesop, Howard Pyle, Uncle Wiggily, Grimm and Andersen — touchstones for ethical behavior in the real world. They were tropes, intended to impart broad and simplistic versions of charity and honor, loyalty and gumption. But as adults we learned to our shock and often dismay that the real world was more complex than the fairy tales led us to believe. And we always felt cheated; we always found ourselves thinking, "They lied to us. They didn't tell us life would be this big a pain in the ass!"

Legend is a film made by an astute adult who, when turned loose, when

given the power to create any film he desired, fled into a throwaway universe of childish irrelevance. *Legend* is, at final resolve, a husk. A lovely, eye-popping vacuum from which a sad breeze blows. Because it finally gives nothing. It steals our breath, captures our eyes, dazzles and sparkles and, like a 4th of July sparkler, comes to nothing but gray ash at the end.

Unlike *Labyrinth*, which is a film made by adults that renews and revitalizes the perception of the world we held as children, yet operates on many other levels — as does *all* High Art — and invigorates the adult in us. *Labyrinth*, were it the first film to which you'd ever been taken, would be as memorable to you as *Snow White* or *The Wizard of Oz*. And it is as important a film as those; and it is as original as those; and it is as rich in multiple meanings as those.

And I will conclude these thoughts about films made by adults that are childish, and those that are *childlike*, next time. Because I seem to have run out of space.

I don't know why that might be.

God knows I've hewn to my stated purpose. I mean, I might have rambled on about all the other films I've seen of late, films I think you might want to know something about, but I didn't. I just hung right in there.

Hoping you are the same. . .

Today it seems that film companies are continuously reviving old films; filmstars of yesteryear suddenly regain popularity and both movie theaters and television indulge in an orgy of movies featuring such stars. Here is a tale of one "revival" and its consequences.

Glory

BY
RON GOULART

One of the most puzzling mysteries in the entire history of Hollywood was finally solved only a few weeks ago. And had things gone just a shade differently, the truth about what really happened to one of the brightest, loveliest motion picture stars of the thirties would have been revealed to the world. That didn't quite happen, though, and this is why.

Dennis Hoff had been sitting in his undersized office in the middle of the Golem Brothers Talent Agency, located just beyond walking distance of Wilshire Boulevard, on that particular hot, hazy Tuesday afternoon. He was a plump, pink man of thirty-eight with not enough hair.

"She's perfect for the part, Joel," he was saying into his phone.

"I admit, Den, she *looks* like a hooker. But when she read for me, she fluffed her lines."

"That was only in your office, Joel. On camera, trust me, Mindy can deliver. She's terrific—"

"Den, it takes a special talent to futz up a line like, 'Oof!' But I am still interested in. . . . Who's the girl you sent me for *Nun with a Gun*?"

Hoff glanced toward his narrow doorway and saw a friend of his hesitating on the threshold. He nodded at him to wait a minute. "That was Lindy. Yep, she's exactly right for—"

"Why don't you give them distinctive names? Mindy, Lindy, they all sound. . . . Got another call. Get back to you, Den."

Hanging up, Hoff grinned. "On the brink of placing two of my clients with Konheim Productions. C'mon in."

Jack Wilker was a modest-sized, dark-haired man in his early thirties. He almost always wore faded gray

warm-up suits like the one he was decked out in today. Tucked up under his arm was a scruffy attaché case. "Smoking is going to kill you."

"It's not me who smokes, you know, old buddy. It's the Golem brothers, both Nat and Larry," he said. "You look less gloomy today."

Taking a deep breath, Jack entered and sat opposite the desk. "I'm going to break out of the hack novelist ranks. No more books in the Spykiller series. . . . I can say good-bye to *Bombs in the Bahamas, Guns in Guatemala, Bazookas in Brazil.*"

The phone rang.

"Excuse me, Jack. Hello? Nothing just yet, Ernie. But, trust me, Vegas is very, very interested. The only thing that's making them a bit uneasy is the way you bill yourself. 'The Grand Old Man of Salsa,' Ernie, they think is a put-off. Remember I did tell you we might have to come up with something peppier? O.K., think about it all, and I'll get back to you. Right now I've got Boz Eager here in my office to sign his contracts for that new cable series, *Gay Cop*. So, *vaya con Dios*, old buddy."

"You're going to get struck by lightning someday," suggested Jack.

"Naw, only lies'll get rid of Ernie Caliente. Have you ever tried to book a seventy-six-year-old marimba player?"

"Not since college."

"A pain in the toke." Leaning back in his chair, he made a small, sad

sound. So why the elation?"

"Nonfiction."

Hoff watched him for a few seconds. "That gets you excited?"

Jack slapped his attaché case on his lap. "You know that Capricorn/AA is planning a \$25 million movie about Glory Sands, the sexy blonde actress who vanished without a—"

"I've been trying to interest Blummer over there in Mindy Mandrake for the past three—"

"I thought her name was Lindy?"

"That's Lindy Landfill."

Nodding absently, Jack continued, "O.K., what I've been working on is a bio of Glory Sands. Her disappearing without a trace back in 1937 is one of the most puzzling mysteries in the entire history of Hollywood." Chuckling, he opened the case. "Yet nobody's done a book on her glittering yet tragic life in years. So I figured I'd put together a proposal and sell the book for a nice five-figure advance."

"Not a bad notion. Is that what's got you so buoyed up, the notion of doing—"

"Better than that, Den." He thrust a hand into the attaché case. "No, I made a discovery late yesterday at a secondhand bookshop down in Oil Beach. Place has a whole damn wall of movie stuff and related crap. Fairly cheap." He produced a slender, weathered, leather-bound volume and held it up, hand jiggling slightly. "Do you know what this is? This is Peter Yarko's last diary."

"That's exactly what I was about to guess. Who the hell is Peter Yarko?"

Jack's head tilted back, eyebrows climbing. "You mean you're trying to get Lindy Landfill a part in *The Glory Story*, and you don't even know—"

"Mindy Mandrake."

"And you don't even know who Yarko was?"

"Hey, I live right here in the present. Only hicks from the sticks play Hollywood trivia, old buddy," said Hoff. "I have to think about current talents like Ernie Caliente, Boz Eater, Lin—"

"Peter Yarko was the director of *The Devil Is a Blonde*, *Blonde Explosion*, *The Blonde President*, and—"

"Ah, proving blondes do have more fun." Then Hoff snapped his fingers. "I remember now; he's the Polish gink who arrived out of nowhere with Glory Sands in tow in the early thirties. Directed her in her first few pics, got screwed by MGM and tossed out. Sure, Victor Yarko."

"Peter Yarko." Jack eased the thin, musty book open. "I don't know how this ended up in that particular bookstore. The point is, nobody's apparently read it ever, beyond the title page. *My Diary. Vol. XXXIII/P. Yarko. 1937.*"

"How much'd you pay for that?"

"Twenty bucks."

"You consider that cheap?"

"Just hush a minute and listen to—"

"Yarko disappeared about the same time she did, didn't he? Right, the movie's going to imply he murdered her in a fit of jealousy and joined the Foreign Legion to—"

"Spanish Civil War. Yarko quit Hollywood, went to Spain to fight on the Loyalist side, and was killed within a few weeks." Jack was leafing through the foxed pages of the old diary as he spoke. "Glory Sands had disappeared without a trace three days before he took off for Spain. By the time anybody thought to question him, Yarko was long gone."

"And he left a big Hollywood-Moorish mansion up in Beverly Hills," remembered Hoff. "Sure, all his nitwit relatives fought over who owned it for years, and it's been sitting empty since the seventies."

"Listen to this final entry. 'Wednesday, March 3, 1937. They took Glory away from me, and that was wrong. Yet I now realize it was also wrong of me to have unleashed her and brought her here to America. But that's been mended, and now, thanks to Tumly, she rests under an eternal spell and the world is safe again and MGM can take a hike. The secret room beneath my wine cellar shall be her last resting place, and never again shall she rise from her coffin. . . .'"

"Tumly," muttered Hoff, stroking his pudgy pink chin, "Tumly. Sure, that must be Byers Tumly. He's still working the occult dodge. Eighty-some years old. I booked him on *Odd*,

Isn't It? a couple years back when those pinhead shows were pop—”

“Den, you’re missing the point.” He rose up excitedly, and his attaché case plumped to the floor, spilling copies of his Spykiller novels to the thin rug. “See, I’ve solved the damn mystery that’s baffled the world for half a century. I know where her body is, I know who put it there, and I figure I can get at least fifty thousand as an advance.”

“Sit.” Hoff made a lower-yourself motion with his right hand. “You have completely, old buddy, missed the real and salient point of all this.”

“It’s that I can now write the first complete biography of Glory Sands,” said Jack, grinning. “I can become a literary lion, a Pulitzer Prize contender, and a fellow who isn’t always three and a half months behind in his alimony payments to not one but two former wives. With an advance in the neighborhood of fifty thou, I can—”

“Fifty thou is jelly beans,” the pudgy talent agent informed him. “We can make millions on this.”

“How? Sell my book to Capricorn/AA as a source of—”

“We sell Glory Sands herself to them, schmuck.”

Jack blinked. “Why would they want a corpse? The publicity value of a dead body doesn’t seem to me to—”

“She ain’t a corpse, ninny.” Grunting, he reached out to grab the mildewed diary from his friend’s grasp.

“Listen attentively now. ‘... an eternal spell ... never again shall she rise. ...’ You’re supposed to have a way with words, yet you didn’t tumble to the obvious and glaring nuances herein. Glory Sands *isn’t* dead; she only sleeps. She’s down there under that deserted manse in a state of suspended animation. Like Sleeping Beauty and other comatose ladies of lore and legend.”

“I suppose you could interpret the—”

“Attend to me, lad,” ordered Hoff, tapping the open pages of the Yarko diary. “This director gink had her put into a trance. Don’t ask me why, but that’s what the guy did. After all, there were some strange folks in Hollywood even back then. Motives don’t matter. Important thing is, she can be revived.”

“Who’s missing nuances now? It says *eternal* spell, and that—”

“Byers Tumly,” Hoff shut the book. “Byers Tumly is alive at this moment, even as we speak, and you sit there like a lunk missing the hotdamn point. Byers Tumly, a crackerjack mystic with the powers of black magic at his command, lives with his sappy granddaughter in Pasadena.”

“So?”

“What Tumly can do, Tumly can undo.”

“Reverse the spell?”

“Yes indeed, old buddy, reverse the spell and bring her back to life.”

Jack scratched his armpit. “In a

way, that'd be great," he said finally. "What I'm saying is, she'd certainly be a good source of information for my biograph—"

"What is Blummer over at C/AA looking for, yearning for, beating the bush for? He's been turned down by Cybill Shepherd and couldn't cut a deal with Meryl Streep. He's seriously contemplating, in the vein of Selznick's hunt for a suitable Scarlet O'Hara, a nationwide search for an unknown to portray Glory Sands upon the silver screen."

"Wait now. We can't do that."

"Why not, pray tell?"

"It's too unusual and strange, for one thing. What I'm saying is, if Glory Sands does awaken from this trance, she's still going to look exactly like she did fifty years ago," said Jack. "Either that or she might be a wrinkled-up mummy who—"

"You still don't comprehend what I intend."

"And how could we explain her to people? Tell them the truth, and they'll suspect either a hoax or they'll be scared off. I don't imagine Blummer at Capricorn/AA is anxious to hire a reanimated corpse to—"

"We aren't going to let anyone know she's really Glory Sands."

"Then how can I finish the biography or—"

"You don't. Not until after we sell her to Blummer to play herself in the bio-pic." Hoff bounced in his chair as he explained this. "No, we market

her as an amazing Glory Sands look-alike. A young and talented newcomer who was born — destined, if you will — to play this role. We introduce her to Blummer — hell, she's a cinch to land the role — and then he promotes her like crazy. As her managers, we get a handsome percentage of everything — her salary, the poster money, the advertising loot, the whole flapping casaba. Twenty percent of millions is going to be a lot more than a paltry advance from some Manhattan book—"

"She might not go along with the idea."

Hoff scoffed. "Hey, this is what I do for a living, amigo," he reminded. "I thrive on selling half-wits inept and malformed actors and actresses that they really have no earthly use for. I can sure as heck, trust me, persuade Glory Sands to pretend to be a gifted unknown."

"And suppose, once we pry open the coffin, she's a little wizened-up mummy?"

"Then I'll get her a job with Ernie Caliente." Hoff rose up. "Let us, however, look only on the bright side. We are, old buddy, on the brink of great things."

A gust of hot night wind came rushing across the weedy back acre of the walled-in Yarko estate. It caught hold of Byers Tumly, inflated the heavy plaid overcoat the frail old mys-

tic insisted on wearing, nudged him over a long-dead hedge, and dumped him into a dry fish pond.

"Indeed . . . hum hum," he murmured, sprawled face down next to a broken stone cherub who was clutching a gulping dolphin. "I am . . . don't you know . . . beginning to remember. This pond, yes . . . used to be fish in it."

Jack caught the wizard's thin arm and yanked him to his feet. "I don't know much about occult ritual," he said to Hoff, who was carrying a large flashlight and a satchel full of rattling tools, "but shouldn't our mystic be sober for this?"

"He is sober."

"Hum hum . . . Peter Yarko . . . remember the night well . . . wind in the willows . . . cast a spell . . . ancient runes . . . Calabar . . . Egbo . . . Nyamba . . . indeed, indeed."

"He's tipsy." Jack guided him around a marble faun and toward the dark, sprawling mansion.

"He's merely old."

The wind came skimming across the sharply slanting tile roofs, twisting the lame weathercock, making rude, raspy sounds.

"Age doesn't smell like an old bar rag."

". . . whatever was the reason for casting the spell? . . . paid me handsomely . . . hum hum . . . Sign of Solomon . . . salamander . . . Obambo."

"It'd be encouraging if he could recall why Glory Sands is sealed up in

the bowels of this—"

"The diary already explained all that, old buddy. Yarko was ticked off at her, so he had our wizard here put her into a trance."

"C'mon, Den, every time you get mad at a lady, you don't call a sorcerer to—"

"I don't, true, but I don't happen to be a brooding, tormented artist like Yarko." Hoff halted in front of the boarded-up rear door of the deserted house.

". . . better off this way," muttered old Tumly, swaying as the wind whipped around him. ". . . make world safe for . . . democracy . . . something like that . . . Nergal . . . Astaroth . . . Moloch."

After setting his satchel carefully on the mossy ground, Hoff extracted a crowbar. "First thing to do is get rid of these boards." He started to do that.

"This is what's popularly called breaking and entering," mentioned Jack. He was clutching the ancient sorcerer, to keep him from blowing away.

"You can tell the cops it's research for your next crime novel," said Hoff, ripping away another old board. "But I really doubt they pay any attention to this pile any longer."

The nails shrieked as he pulled them free. Downhill somewhere a lone hound commenced howling forlornly.

"A bad sign," observed Tumly.

"Perturbed spirits prowl."

Jack asked him, "You sure you have no idea why Glory Sands was—"

"It'll come back to me." He chuckled in a rusty way. "Yes . . . hum . . . this excitement is good for me. Gets the brain to clicking along once again. . . . Sitting in Pasadena can be. . . . Do you have any idea how many game shows there are on television?"

"Must be about—"

"There," announced Hoff. "All the boards are down. Now I'll pick the lock."

"You know how to do this sort of thing?"

"Well, it ought to be relatively simple, shouldn't it? Thousands of people who never even graduated from high school become burglars." He squatted before the tarnished doorknob.

"Yes, I remember this house," said Tumly, wrapping his large plaid overcoat tighter around him and venturing along the dusty hallway. "It didn't smell so strongly of rot and decay then."

The long corridor, paneled with dark-stained wood and floored with dusky mosaic tiles, was thick with the odors of mildew and neglect.

Hoff played the beam of his light ahead, touching the carved panels, the wrought-iron wall lamps, the serpentine pattern in the tiles. "What a setting," he remarked. "This must inspire the creative writer in you, Jack."

"Inspires me to want to get clear before the cops find—"

"This way." Tumly was pointing to their left. "There's a stairway off yonder kitchen . . . Hum hum . . . I'm remembering more by the minute. Yes, she lies down below."

The old wizard lurched, tottered, and caught hold of a dusty wine bottle on one of the racks that filled the damp, stone-walled room. "Hum, yes. It's coming back to—"

Jack made a grab for his sleeve. "This is not time to go guzzling—"

"I'd never touch port." Tumly caught hold of the bottle by its neck, pushed it downward. "This particular bottle happens to be a concealed lever, young man."

A rumbling started up across the shadowy wine cellar. Gravelly noises came rattling up from below. Next came an echoing, bumping thump.

"He *is* remembering rightly." Hoff turned the beam of the flash onto the twisting stairway that was showing now in the large rectangle that had opened in the floor.

The coffin was down there, a heavy thing of bronze. It rested on a low stone pedestal, gobs of scarlet sealing wax dabbed around the edges of the domed lid.

Hoff hurried across the chill stone floor and knelt next to it. "This hasn't been futzed with," he said. "Meaning Glory's still inside."

"This is going to make a great

chapter in my book." Jack approached the bronze coffin. "Yeah, and I can spin off lots of articles, too. Slick magazines first, then supermarket tabloids."

The old mystic shuffled over. "Things are growing ever clearer," he assured them, poking his knobby hands into the pockets of his immense overcoat.

"And Glory Sands is really inside there?" Jack asked him.

"Helped deposit the lady within it myself." Tumly had located a magnifying glass with a bit of fuzz sticking to its lens. He made a slow circuit of the coffin. "Hum hum. . . . Yes, to be sure . . . simple enough restraining spell . . . yes." From another lumpy pocket he brought forth a fat black candle. "Stick this on that shelf over there, young man, and light it."

Jack obliged, nose wrinkling at the acrid smell the sputtering candle produced. "Can you—"

"Quiet, please." Tumly had straightened up, and there was a small skin-bound volume open in his quivering hands. "Beelzebub . . . Beelzebub . . . Beelzebub."

Shivering, Jack took a few backward steps.

The old sorcerer continued on, mixing Latin with incantations in even older, deader languages.

Five long minutes passed.

Then the thick globs of crimson wax sizzled and started melting. Clotted streams of red dribbled down

across the bronze sides of the heavy casket.

"Now, be quick, lift the lid free," Tumly ordered.

Hoff took the far side, Jack the other. Grunting, they managed to lift it up and away.

While they were leaning the lid against the stone wall, a satiny rustle sounded within the open casket.

A very pretty blonde young woman in a white satin evening gown sat up in the casket and looked around at the three of them.

"Ah yes," said Tumly. "I remember now why we sealed her up. She's a vampire."

Hoff, grinning broadly, came into the cottage out of the fuzzy glare of the afternoon. "Absolutely great," he announced, waving the manila envelope he held aloft in his pudgy right hand. "I picked up the contact prints of the pics we had Orlando of Hollywood shoot couple nights ago, and they're completely sensational. She looks, specially in that slinky satin dress she was interred in, just like Glory Sands."

"She *is* Glory Sands." Jack was sitting in his favorite, and only, armchair and gazing into his small, empty fireplace. "She was hidden away under Yarko's place because of her vampire ways. But now you've stuck me with baby-sitting a potential kill—"

"C'mon, she agreed to downplay

that stuff," the agent reminded. "Glory's as anxious as we are for a new career in—"

"Also, Den, I don't see why we have to spend so damn much on those photos."

"Because, old buddy, we are going first cabin on this whole venture. We're going to sell that platinum bimbo as—"

"Not so loud," cautioned Jack in a lowered voice. "But what I'm talking about is, I have to pay rent on this place, and I've had to shelve my bio so—"

"What are you so uneasy about? She can't hear us." Hoff settled into the wicker sofa with his broad back to the view of the overgrown yard outside. "Vampires sleep by day, don't they?"

"Nertz," observed a feminine voice from the next room.

"Apparently that isn't always so." Jack nodded toward the doorway of his kitchen.

"Well, then that's even better for us. That way we won't have to con Blummer into filming *The Glory Story* entirely at night."

"You bozos really hand me a laugh." The lovely blonde, wearing one of Jack's candy-striped shirts and a brand-new pair of designer jeans, came into the parlor holding a fat baloney sandwich. "Where'd you get your facts about vampires anyhow, from some B-movie starring that dippy Hungarian hophead who went flap-

ping around in a cape? Jeez." She perched on the arm of Jack's chair, one pretty leg swinging out and tapping the base of his old floor lamp. "Vampires have been getting a bad press for. . . . Hey, are you sure dames wear this kind of slacks nowadays? They're so tight my fanny's going to sleep."

Watching her, Hoff nodded approvingly and chuckled. "Perfect, she's perfect. That sassy 1930s patina will knock Blummer and his toadies on their respective tokens."

After taking a bite of her sandwich, Glory said, "This baloney sure as heck doesn't taste like the baloney I remember."

"Fifty years," reminded Jack, "have passed since you last tasted—"

"Darn, I never figured baloney would change." Sliding off the chair arm, she crossed to the window. "Smog, huh? It sure does a swell job of mucking up the air. Don't you ever have your shrubs trimmed, Jack? I had two Japs who did—"

"How'd you like to see your pictures, Glory?" Hoff was shaking the proof sheets from the envelope. "You look great."

"Cameras love me," she explained, biting into her sandwich. "Even in Paris in the 1870s, I—"

"Whoa now," cut in Jack, "you were alive in the 1870s?"

"Why the heck do you think I became a vampire in the first place, sweetheart?" She turned to face him,

wiping a speck of mayonnaise from her dimpled cheek. "Immortality. Sure, I was born in Lisbon . . . that's in Portugal . . . in 1726."

Hoff lowered the photos to his lap. "Glory, we better not mention that fact to anybody else, O.K.?"

"You think I'm a dope? I mean, honey, I want to start making dough again more than you guys even." She gave Jack's small forlorn parlor a disdainful look. "I sure don't want to live in this cracker box much longer."

"Exactly. And as soon as I sell you to Blummer, we'll start looking at mansions in Bel Air," promised the agent. "That's the sort of setting Gloria Sanctum needs."

"Jeez, what a dippy name." The reanimated actress lowered herself to sit on the bare hardwood floor, leaning her slim back against the built-in bookshelves. "I know I can't call myself Gloria Sands anymore, but—"

"Gloria Sanctum has a certain flair," Hoff assured her. "And preserves your initials."

"I never even much liked Glory Sands. That was Yarko's idea," she said, shaking her lovely head. "Imagine that bum having a spell put on me and dumping me in his darn basement."

"Apparently," said Jack, not quite looking at her, "he was concerned about your vampire activities and—"

"Hell, no. I think he just wanted to give MGM the finger." Finishing

her sandwich, she licked her fingers. "Yarko exaggerated things, like most creative bozos."

"Are you suggesting," said Jack, "that you really weren't much of a practicing vampire?"

"Look, sweetheart, once in a while I did maybe drain some sap of his blood," she admitted, smiling attractively. "I mean, you're a vampire and that's what you do, you know? But I was discreet and I didn't do it often. Rarely with anybody in show business."

"So there's really not that much to worry about," said Hoff.

Very gracefully the blonde actress stood up. "Let me see the pictures, Denny."

"To me, Glory . . . Gloria, rather. Better get used to using your new name." He handed her the sheets. "To me, Gloria, the shots of you smiling right into the camera are the best."

She studied the shots. "My left profile isn't bad either," she remarked. "Being buried for fifty years hasn't really hurt my looks any."

"Gloria, you're as lovely now as—"

"Hey!" After staring out the window, Jack hopped up and ran for the door.

"What's wrong, old buddy?"

"Somebody outside, peeking over my hedge at us."

The two men ran out into the hedged-in yard. But there was no one out there now.

"You get a look at him?" asked Hoff.

"Not really, but. . . . It was a guy . . . and there was something vaguely familiar about him."

"Hey, you two," called Glory, "come on back in here and let me tell you which ones of these we're going to use."

Jack tossed another shovelful of dirt aside. "What was it you were going to tell me when you first got here, Den?"

"Huh?" Hoff was thumbing through the notebook he'd found in the pocket of the dead man sprawled on the garage floor. "Oh yeah, good news. Blummer was very, very impressed with the glossies of Glory . . . Gloria. He wants her to come in and read on Monday. It's a sure thing, far as I can tell."

The grave was getting deeper. "Don't you think maybe this is a snag?"

"How so?" Hoff shut the notebook.

"You were paying attention when I explained to you that I found this guy out behind my cottage a couple hours ago, at sundown? What I'm saying is, he was killed by a vampire."

"Well, any half-wit can see that," said the agent. "He's got those two puncture marks in his throat, and he's been drained of his blood."

"Glory did it."

"Call her Gloria."

"Gloria. Glory. She admitted as much before she locked herself in the bedroom."

"Let her sulk for a while; that's O.K."

"But she—"

"He's only got himself to blame, old buddy." Hoff slapped the notebook against his thigh. "This is Walt Downey, a free-lance writer for *The National Intruder*. He's also the very same chap you spotted prowling amongst your shrubbery a few days ago."

"A reporter? Damn, that means—"

"A *free-lance*," cut in Hoff. "Nobody knows what he was planning to write about next. Seems he was interviewing Tumly for some other article, and the old gink let slip a reference to us and Gloria."

"What sort of reference?"

"Sort of to the fact that we'd brought her back from the grave. Keep digging, will you?"

"That's splendid. Glory's resurrection's going to become a mass media event."

"Downey had only, according to his notes, begun to investigate. He wasn't yet sure if we had Glory Sands or were simply cooking up a hoax for publicity purposes," said Hoff. "Fortunately for us, she got him just in time."

"It's murder."

"Not necessarily. The fact she's a vampire would make a good defense," the agent said, watching Jack work

on the reporter's grave. "Sure, she can plead she couldn't help herself. But it'll never come to that. We bury this gink and—"

"Making us accessories."

"From what I can learn out of his effects, old buddy, Downey had no near kith or kin. Even the *Intruder* won't miss him, since most free-lance writers are expendable," said Hoff. "Let's therefore, strive to look only on the bright side. Think about what our share of her salary of, say, four hundred thousand dollars per picture is going to be. And keep digging."

Glory took another sip from her glass. "Phooey," she remarked. "This stuff sure doesn't taste like orange juice."

"Let's get back to the issue." Jack was seated across his small lopsided breakfast table from her.

"'Made from concentrate.' Whatever the heck that might be. I mean, how dippy can you get?" She clicked the glass down. "You got fresh oranges out the kazoo all around here, and you dumbbells—"

"About Downey."

"Who?"

"The reporter you got rid of the other night. We really have to talk about—"

"Jeez, are you still squawking about that? Denny didn't think it was all that important."

"Glory, I have a small garage.

If you keep on—"

"The guy was poking his nose into our business, wasn't he?"

"Having all your blood drained from your body isn't quite the punishment that fits that particular—"

"O.K., O.K., swell. Don't keep nagging, O.K.? I'm doing the best I can," the blonde told him. "I just wish we'd get that contract signed so—"

"Blummer was favorably impressed with you when you read for him, according to Den."

"Blummer, what a twerp," she said, tangling her fingers in her silky hair. "You know what he used to be? A certified public accountant. That sure isn't my idea of a mogul. And that dippy director . . . what's his name?"

"Piet Goedewaagen."

"He's younger than I am," she said, frowning. "Younger than I'm supposed to be, I mean. He passed out cold before I even got to the second page of my dumb scene."

"Goedewaagen has a drug problem, I hear."

"He fell off his darn chair. Plunk on the rug."

"Let the producer worry about him. You—"

"Woody Van Dyke never fell off his chair. When we shot *Blonde Fever* up at Catalina in '35, he—"

"How often are you likely to attack people?"

"¿Quién Sabe? as they say in Tijuana." She shrugged gracefully. "It sort of depends on my mood and

whether I'm bored or not. Sometimes, you know, I just get the urge."

Jack took an unenthusiastic bite of his cold toast. "Glory, could—"

"Call me Gloria. We don't want to spoil—"

"Killing people is going to spoil things a lot sooner than my calling you the wrong name," he said. "Now, when you were here before, back in the 1930s, about how often did you attack—"

"Not all that much. It fluctuated."

"Can you give me a ballpark figure? What I'm asking is, how many victims did—"

"Oh, less than a hundred."

"A hundred?" He dropped his toast.

"Less than, I said."

"Ninety?"

"Give or take."

"How'd you keep people from finding out that—"

"Yarko took care of most of that," answered Glory. "Seeing that they got buried or lost in an out-of-the-way place. And sometimes I'd go after a nobody down on Skid Row."

"You were in Hollywood from 1933 to 1937." He eased a small calculator out of his jacket pocket. "That's four years. So we divide ninety victims by four, and we get . . . Oy! . . . 22.5 per year."

"That's a cute gadget. Can I see how it—"

The phone sounded out in the parlor. "You can fool with it. Here."

Tossing her the pocket calculator, he sprinted into the next room. "Hello?"

"We're on the real brink now, old buddy. I just got a call," said Hoff.

"I'm not hearing you too clearly. What's that noise in the background?"

"Marimba music." The agent raised his voice. "Blummer just phoned. Wants me over at C/AA in one hour. I smell six figures in the offing."

"Listen, Den," said Jack, hand masking the mouthpiece. "If we unleash this creature on the world, we're going to be responsible for at least 22.5 deaths per year for—"

"Ernie, that's *bastante*, old amigo. I like the new act, and, trust me, I'll book you at someplace terrific. Now get the hell out of here. Adios," Hoff was saying. "O.K., Jack, you—"

"Twenty-two point five. That's the number of victims we can count on each year that she's still above-ground." Jack glanced at the kitchen doorway. "So what we have to do, we have to get Tumly and seal her up again under—"

"Can't get Tumly."

"You didn't book him off in the boondocks someplace?"

"The poor old gink passed on."

"That's . . . wait a second. How?"

"What?"

"How'd Tumly come to die?"

Hoff coughed. "Don't scream and yell when I fill you in."

"Never mind. I know. His daughter found him sprawled out someplace with all the blood missing from—"

"Grandaughter, it was, who found the poor soul."

"Yeah, and Glory was gone the night before last," he said in an intense whisper. "Wouldn't explain where she'd—"

"Let's keep looking on the bright side," said Hoff. "When I next visit your place at dusk, I have no doubt that I'll have a very nice contract close to my girlishly pounding heart."

"No, nope. You have to get another sorcerer then. He can put—"

"Where am I going to get a sorcerer?"

"You're a goddamn talent agent. Go find one. And quick. If you can find an eighty-year-old salsa player, then—"

"Calm yourself. Put Glory on the phone," requested the agent. "I'll impart to her all the good things that are in the offing, and use my considerable powers of persuasion to convince her to lay off her hobby for a while. I'll get her to promise she won't do anything to futz up her budding career."

"Vampires," said Jack, "don't keep promises."

. . .

Hoff arrived at dusk, his stride slower than usual. His pudgy body had a mournful sag. "Idiots," he said as he stepped into the parlor. "I should have remembered that this is Hollywood."

Jack was in his favorite armchair, surrounded by shadows.

"I go over to see Blummer," continued the unhappy agent. "I am ushered into his vast Capricorn/AA office. And what does that nitwit tell me?"

Jack didn't respond.

"He tells me," said Hoff, "they've decided they don't want Glory to play Glory Sands in their movie. And why? I'll tell you why. She's not right for the part."

Jack didn't respond.

Slowly Hoff crossed the dim room. "Well, don't be gloomy, old buddy. I'll come up with a new way to sell her to somebody." He reached out and clicked on the floor lamp next to the chair.

That was when he saw the marks in Jack's throat.



*"Insecticide," Steven Saylor's first story for F & SF, neatly and grip-
pingly joins two of our contemporary phobias: the fear of pesticides
and the threat of terrorism. Although he is now a resident of San
Francisco, where he has worked as an editor and writer for a number
of newspapers and magazines, Steven Saylor grew up in Texas. "In a
very small town," he notes, "only a few miles from Cross Plains,
where Robert E. Howard wrote his Conan stories."*

Insecticide

BY

STEVEN SAYLOR

Waiting for his call to go through, John Moreland idly doodled in the margin of the Bund Service Directory. He drew an oval, and then attached it to another, smaller ellipse. He added antennae and legs and then realized with a start that he had drawn a cockroach. Moreland shuddered.

The telescreen abruptly crackled and came to life. "Good morning, Exterminators Unlimited, a division of Bund Corp." The woman's face was young and severe, her eyebrows shaved and her hair pulled back into a tight bun. Her voice was clipped and precise, slightly nasal. "May we help you, sir?"

"Yes." Moreland cleared his throat. The woman was not particularly attractive, but he saw so few women these days; he wished he had shaved and combed his hair before calling. "I

need an exterminator. As soon as possible."

"I see, sir. The name of the beast?"

"Roaches. Cockroaches. Hundreds of them." He glanced at the carpet, where half a dozen roaches scurried across the room in different directions. "Thousands of them," he confessed glumly. "I've tried handling it myself, but I'm afraid the problem is out of control."

"A very common complaint, sir."

The woman flashed a mechanical smile. "Especially at this time of year in Houston, with the heavy rains. Your name and address?"

"John Moreland. 1000 Richter Drive, apartment L. In the Richter Compound, by the lake."

"And *you* are a Bund affiliate employee?"

"Yes, master account number 807-4-94-D."

"That's a priority D-as-in-Dragon, sir?"

"Correct."

"I see. Did you have a particular date and time of day in mind, sir?"

"Anytime, really. I work at home. As soon as possible."

"Would tomorrow afternoon at three be inconvenient?"

"That would be fine. Is there anything I should do to get ready?"

The woman answered by rote without taking a breath. "Yes, remove-all-food-and-utensils-from-kitchen-shelves-place-elevated-in-the-middle-of-another-room-perhaps-on-dining-room-table-cover-with-plastic."

"Closets?"

"Closets will be sprayed, sir, but leave-contents-in-place-as-it-will-be-necessary-to-lightly-spray-all-furniture-clothing-and-so-on."

"Oh. I see. How toxic is the spray? I suppose I should leave the apartment for a while."

"Not absolutely necessary, sir. The smell is the worst part. If you stay, you may experience slight-headache-perhaps-even-a-touch-of-nausea. If you leave the apartment for a few hours, there should be no discomfort. We're using a new formula this season, sir, 811, highly toxic to the bugs but entirely harmless to humans when correctly applied. Have you any further questions?"

The woman's pat monologue left him slightly uneasy. He felt there was

something more he should ask, but it escaped him. "No. I guess that's all."

"Then our representative will be seeing you at three o'clock tomorrow afternoon."

"Thank you."

"Thank *you*, sir." As the woman's lips spread into a broad smile, a cockroach slithered onto the screen. The woman bolted back, her smile suddenly queasy; Moreland realized she must be seeing the insect's underbelly magnified to grotesque proportions. He automatically reached for the fly-swatter he carried at all times, and snapped it against the screen. The woman bolted farther back and yelped, then lifted her hand to her mouth as Moreland drew back the swatter to reveal the crushed and oozing shell glued to the screen. The transmission ended. The screen faded to black.

"Gotcha!" Moreland growled. From the corner of his eye he glimpsed another cockroach, slithering over the top of the Bund Directory and scurrying down the page. He slammed the book shut with a thin smile of triumph.

The next afternoon at 3:15, he signed off at his terminal. The project was giving him fits, and the exterminator was late. Moreland could not work in constant anticipation of a buzz from the intercom. He paced the floor for a moment, then decided to watch video. He flicked a roach

from the handset and pointed it at the liquid crystal screen that covered the wall.

Moreland seldom watched video anymore. Entertainment, even on the private services, was always being interrupted by news. The news was too depressing to watch. Last week he'd happened to catch a local report about a fleet of Mexican refugees blown out of the water only a mile out of Galveston Bay, in full view of the news cameras that had come to record their arrival. Authorities suspected a Cuban submarine.

That had been immediately followed by a report about a woman shot to death downtown. When they flashed her face on the screen, Moreland had been shocked to realize that he knew her — Sheila Blair, an acquaintance from his days at the downtown office. She had been killed during her lunch hour in cross fire between police and the TGR, or GRT, or something like that; Moreland could no longer keep the acronyms straight. It was because of such incidents that he had arranged to have the work terminal installed in his apartment. Loneliness was preferable to the danger in the streets.

Now, as the image on the screen rippled into focus, Moreland saw yet another newscast. It was no use changing channels. Views of the Manhattan skyline, NYC Senator Ripstein with her bodyguards wading through a crowd of frantic reporters — this

one looked big, everyone would be carrying it. He turned up the audio in spite of himself.

“— plot was foiled when a special SWAT team raided the building in midtown Manhattan, killing all but two of the terrorists.” There was an aerial shot of a gutted tenement belching columns of smoke. “There is no word yet on whether NARA, or New American Revolutionary Army, the group that rented the basement of the building, had actually succeeded in constructing a small nuclear device, as was claimed in their ransom note to Governor Ripstein.”

The image switched to a close-up of the reporter's face. “Meanwhile, in Los Angeles, a communiqué from the People's Liberation Front, or PLF, claims that they are in league with NARA. That claim was denied in a countercommuniqué from NARA leader Iris Carlson, in exile in Mexico City. The PLF, you may remember, was the group arrested in Los Angeles last week after a similar black-mail attempt, in which police discovered that the terrorists *had* succeeded in building a rudimentary nuclear explosive. For more on that story, we go to Neil Peterson in Los Angeles. Neil?”

Moreland continued to watch with grim fascination, until a buzz at the intercom distracted him. He muted the audio as he walked to the door and flicked on the observation screen. The man outside his door was tall

and thin. A patch on the breast pocket of his baggy gray overalls displayed the name *Bob* in embroidered red script, and beneath that a decal of the yellow logo for Exterminators Unlimited, *ExUn*. His right arm cradled a thin metal cylinder with a long nozzle. Moreland could not quite make out the man's face, shadowed by the brim of his gray cap.

"Mr. Moreland, apartment L?"

"Yes."

"I'm the 'terminator you sent for."

The man tipped his cap at the camera. "They already cleared me at the gate."

Moreland depressed the hydraulic lock, and the door slid back. The man nodded and stepped inside. The first thing Moreland noticed was the faint smell of poison that clung to the man's clothes. Then he saw his face.

The exterminator looked to be in his thirties, but his cheeks were pocked with red and purple acne. Thin, wispy tufts of orange hair showed around the edge of his cap. His left eye protruded slightly from its socket and was covered with a milky film of blue mucus.

The man smiled at him. "You know, it's a funny thing; when folks look you in the eye, they can't look in both eyes at once. You ever notice that? They have to look into one eye or the other. People always seem to look me in my bad eye — which don't make sense, 'cause I can't see a damn thing out of it." He cocked his head,

and his smile broadened into a grin that showed crooked teeth.

"I'm sorry," Moreland stammered, looking away.

"Aw, that's all right, mister. Like I said, everybody does it. My own *mother* does it. I just like to get things out in the open. Can't be comfortable if I'm making other folks uncomfortable, know what I mean?"

"Yes, I suppose so...."

The man walked past him, surveying the apartment with a professional air: the fireplace, the bookcases, the high beamed ceiling, the antique desk with the blank terminal framed by polished mahogany cabinets.

"Nice little place you got here. Real nice. Well, I'll just get to work. You can go about your business. Or you can watch me. Lots of folks never seen how a 'terminator works."

The job took a little over half an hour. The man began in the living room, spraying thin jets of poison along the baseboards, around the sliding glass doors, behind the books, above the top of the video screen.

"They like to hide under these big wall screens, you know that? Dark and narrow behind there, primo place to lay their eggs." As the man spoke, hundreds of cockroaches erupted from behind the screen, radiating like a halo around the five-times-larger-than-life image of Iris Carlson denouncing the PLF via satellite from Mexico City.

"There seem to be even more of

them than I realized," Moreland mumbled. "They weren't this bad, even a week ago."

"Nothing to apologize for, sir. Even in your best neighborhoods, like this one. Those guards at the gate may keep out your human pests, but not your roaches. Nope, they'll find a way to get in anywhere, and they breed like crazy in this Gulf climate. Don't help, you being close by the lake." The man sprayed his way into the bathroom. "And all those pretty trees — big ones live in trees, you know that? The real big ones that fly at you and make a spitting noise when you try to swat 'em. Come inside when it's dark, to eat. And when these summer rains start up and it's all hot and humid, the little buggers just crawl out of the woodwork and take over."

As he spoke, he lifted the toilet seat and sprayed a ring of poison underneath, then aimed the nozzle at the corners in the shower stall. Insecticide spattered off the tiles and into the tub.

"You're not being too liberal with that stuff, are you?" Moreland covered his mouth and nose with one hand. In the small room the smell was overpowering. How did the exterminator stand it, spraying house after house and going home at night stinking of poison? Moreland thought of the rheumy eyes, the pocked skin. The man seemed a bit feeble-minded as well.

"Too liberal? Shoot, no," the man said pleasantly. "Got to use plenty. You want to get rid of these pests for good, don't you?"

The man moved through the bedroom and into the closet, adjusting the spray to a fine mist. Moreland watched as the yellow vapor suffused his shirts and slacks. The exterminator made another circuit of the bedroom and worked his way down the hall and into the kitchen. He sprayed the empty cabinets until the corners were soaked, then put down a fine mist over the clay tile floor.

The fumes were making Moreland choke. He walked to the boxes on the dining room table and found an old pack of cigarettes. He lit one, hoping the menthol would help kill the chemical odor, but the smoke, mixed with the fumes in the air, burned his throat and filled his mouth with a taste like stale gasoline. He stubbed the cigarette out.

"Well, all done."

Moreland walked the exterminator to the door. "I was wondering, should I wash out the shower before I use it?"

"Naw, you got to leave the poison in place."

"Oh. Then maybe I should wait a day or two before I put the plates and food back into the cabinets. Or wipe the shelves first? I mean, there are standing pools of insecticide—"

The man laughed and shook his head. "No, just put everything back

and act like I was never here. I know what you're worried about. But this stuff don't hurt humans. You'd probably have to drink a glass of it to get sick. It's this new formula we're using. Not like the old stuff. Now that stuff we'd have problems with, sometimes." The man lifted a finger to his face. At first Moreland thought he was pointing to his eye; then he realized the man was simply scratching the side of his nose.

"Trust me. Now the smell is pretty bad business. You might want to clear out for a bit. Open some windows, get some air circulating in here."

Moreland followed him outside. The fresh air cleared his head. "Oh, I almost forgot — what are the charges?"

"About two hundred units. They'll charge your Bund account."

Moreland nodded. "That's certainly reasonable." At two hundred U, ExUn couldn't be paying the man very well. It was a dirty line of work, he thought, with all the poison and stink.

"Here," he said, pulling his wallet from his jacket. "Can you accept a tip? I — enjoyed talking to you." It was true. He was glad the man had been talkative and a little quirky, instead of professionally stiff and silent. Moreland never seemed to talk to anyone in the flesh anymore, since he'd installed his office at home. He handed the man a fifty.

The exterminator whistled. "Well,

real cash. Thank you, sir. And it was nice talking to *you*." As the man walked away, he looked back over his shoulder, tipping his cap and winking his rheumy eye. The effect was so startling and grotesque that Moreland's mouth tightened into an automatic grimace. He quickly stepped inside, hoping the poor man had not seen his unavoidable revulsion.

The apartment was like a poisonous pit, the air dense and scalded. He switched the central cooling to *fan* and walked through the rooms opening windows. It was eighty-five degrees and sultry outside, but there was a slight breeze. He signed in at the terminal to say he would be out for a few hours. It was a good day, he decided, to take a walk around the lake.

Just as he reached the water's edge, a light rain began to fall. Heavy, dark clouds were forming in the east. The breeze became a steady wind, and soon the rain had become a full-fledged torrent. He sat out the storm alone on the covered deck of the compound clubhouse, sipping coffee and watching the play of the lightning over the lake.

When he returned, he regretted having left the windows open; the humidity had turned the apartment into a hothouse. The kitchen floor was wet with rain and insecticide, and littered with hundreds of dead or convulsively dying insects. It took him an hour to clear away the dead

roaches, restock the cabinets and sop up the mess the storm had made. The apartment still reeked of insecticide.

For dinner he heated a frozen casserole in the microwave. The activated oven seemed to exude a sharp smell of poison. Had the exterminator sprayed inside? Moreland had turned his back on him for a moment — to get a cigarette, he remembered. Surely not. Yet all during his meal, he seemed to taste a trace of poison baked into the meat sauce and noodles.

He decided that his clothes carried the smell, so he stripped and threw them into the laundry chute. He sniffed his hands, and decided he could smell the poison on his fingers.

The bathroom was musty as a steambath, and reeked of poison. Droplets of insecticide clustered like beads in the bottom of the tub. Moreland made up his mind that the exterminator had definitely been too generous with the spray; he thoroughly rinsed the stall before he stepped inside. The steaming water and the slick caress of the soap helped relieve the aggravation he felt over the man's carelessness.

Later, lying in bed waiting for sleep, he began to feel a sharp pain in his stomach, pulling into knots and then subsiding, like a clenching fist. He felt a dull pressure in his forehead, and his temples began to softly throb; that was probably just his sinuses reacting to the humidity. But

there was also an uncomfortable fullness in his throat.

Then his skin began to tingle. The sensation was subtle, but it covered his body. Before he realized it, he was scratching himself, rubbing one foot over the other, raking his fingernails across his chest.

He stopped himself and tried to relax. All the symptoms, he realized, were vague and ill-defined, like phantom pains; if he stopped thinking about them, they seemed to go away. He had decided that he was imagining it all, when he thought of the soap.

The exterminator had doused the entire shower stall; Moreland had watched him do it. He must have sprayed the poison directly onto the bar of soap. And Moreland, like a fool, had rubbed the contaminated bar all over his body, thinking he was rinsing away the faint fumes left over from the afternoon. He threw off the sheet and turned on the bedside lamp. He looked down at his chest and legs. The skin was not broken or discolored. Still, there was a definite itching.

He clutched a handful of the sheet and held it to his nose. Yes, there was a faint chemical smell. The humidity had infused the bed with toxic fumes.

He stripped the bed and remade it with fresh linens. He threw away the bar of soap and showered with a new one. It was close to two in the morning, and only after he had taken a si-

nus tablet and a sedative was he able to fall asleep.

The next morning he woke with the sheet twisted around his body and one arm hanging over the edge of the bed. The sheet was soaked with sweat. His throat was scratchy and dry. A bad dream, the details unremembered, lingered in his head. Moreland stirred, and found that he was more exhausted than when he had gone to bed.

He rolled weakly out of the bed and stood, untangled his legs from the crumpled sheet, then stumbled into the bathroom. He opened the medicine cabinet and reached for the thermometer. He slid it under his tongue and sat on the toilet, waiting for the mercury to rise. The smell was still nauseatingly strong in the bathroom. He felt a crackling under his feet, and looked down to see the floor littered with dozens of dead roaches.

He took the thermometer from his mouth. Temperature normal. Impossible, he thought, then realized he was feeling better. Perhaps he only needed to wake up. But as he brushed his teeth, thinking he could faintly taste a residue of poison in the bristles, the itching began to return, along with a mild headache.

All morning the light breakfast of poached egg and toast rumbled in his stomach like the far-off thunder be-

yond the lake. He was mildly nauseated. The headache grew worse. His eyes watered. Around noon the itching reached a crescendo. He scratched until his chest and arms were scored with thin welts. At two o'clock he banged his fist against the keyboard, sending a confusion of beeping signals across the screen, and gave up on working. He reached for the Bund Service Directory and opened it to the page with the flattened cockroach.

The same woman answered. She recognized him and frowned for an instant, but her voice was as pert as ever. "Good afternoon, ExUn, a division of Bund Corp. May I help you?"

"Yes. At least I hope so. My name is John Moreland. I had my apartment treated yesterday—"

"Yes, sir, I remember. For cockroaches."

"Yes, well, I seem to be experiencing some — some ill effects from the poison—"

"Surely not, sir. Slight headache and nausea are possible immediately following application of the formula, but within a few hours the residue is totally inert. You see, the human body is able to metabolize and neutralize—"

"All right, yes, I've been told it's safe. But you see, I think I may have gotten it on my skin. Directly, all over my body. It was the soap. There's no visible rash, but I'm itching like mad. Could that—"

"No, sir. There have been no cases

of epidermal reaction to Formula 811."

"Yes, but are there ever any, I don't know, combined effects? Cross-reactions? With soap, perhaps. Or tobacco. Yes, I remember, I smoked a cigarette, and I must have been inhaling the fumes at the same time. And I may even have eaten some of the stuff. It was the microwave—"

"Sir, I assure you —"

"And the man who was here — I think his name was Bob — he seemed a little off, you know? I think he used too much. I mean, the stuff was all over the kitchen floor, in the bathtub, even on my clothes. Damn!" His armpits suddenly prickled with an intense itching, and Moreland could not resist crossing his arms and digging his fingers into the flesh.

The woman raised the bony ridges where her eyebrows had been shaved away. "That sounds like correct application procedure, sir." Her voice had grown thin with impatience. "Perhaps you'd like me to put you through to Complaints?"

"Yes. I suppose," Moreland gasped, scratching madly.

"Can you hold?"

Before Moreland could answer, there was a faint click from the speaker and the screen went dead. The idiot had cut him off. He saw no point in calling back.

It was not until the next afternoon

that he reached for the Service Directory again. The symptoms were escalating. He had managed to sleep only a few hours. He had no appetite. His skin ached from constant scratching. Work was impossible. He found the section for Medical Services, and had to key the code three times before he got it right.

"Good afternoon, Tabor Medical Plaza, a division of Bund Corp."

His eyes were watering so badly he could hardly make out the image on the screen, but Moreland could have sworn it was the same woman who had answered at ExUn — the same shaved eyebrows, the hair pulled tightly back. Even her voice was the same, impersonal and aloof. "Yes, I want an appointment with Dr. Avildsen, as soon as possible. Priority D."

"Certainly, sir. And your name and Bund account number?"

Moreland sat alone in the consultation room and listened to the rain. It was midafternoon but dark outside, the heavy thunderclouds covering the city with a strange twilight. He leaned toward the fogged window and studied his reflection. The stark light from the fluorescent panels above turned his cheekbones into jutting blades and cast his eyes in deep shadow. He leaned closer to the glass and tilted his head back until his eyes caught the light. They stared back at him, watery and unnaturally

bright. The back of his neck prickled. He reached up reluctantly to scratch it.

He heard voices from the hallway, and snatched his hand away. Dr. Avildsen entered, closing the door behind her. She gave him a noncommittal smile that could have meant anything. That he was dying. That he would live forever.

"Hello, Doctor." He kept his hands folded in his lap, even though the itching had spread from the back of his neck to his throat, and was now creeping down his chest. "I hope all those tests add up to something."

"Yes and no," Avildsen said, stepping behind her desk. As she sat, she looked up to see him staring bleakly at his folded hands. "I'm sorry, Mr. Moreland. I realize you're very upset. It's been a very long day, for both of us. I'll try to be as clear as I can." She removed her glasses, rubbed her eyes, and ran her fingers through her short gray hair.

"Mr. Moreland, since you arrived this morning, we've run an extensive battery of tests on your blood, urine, and skin tissues. We find no trace whatsoever of ExUn Formula 811, or any other poison. And in any event, Formula 811 is, as you've been told, completely harmless to humans."

"Then how do you explain this?" Moreland was suddenly on his feet, looming over her, his arms extended palms up. Avildsen jerked back, startled. She put on her glasses with a

defiant gesture, as if they somehow gave her a shield of authority.

"I'm aware of the condition of your arms, Mr. Moreland, as well as 80 percent of the rest of your epidermal tissue. Your skin is severely abraded, but to all appearances the trauma has been entirely self-inflicted. There's no sign of rash or burn or allergic reaction. And no infection, although it's quite likely you'll get one if you continue scratching yourself."

"And what the hell am I supposed to do with this constant, goddamned itching?" He gave in to the urge at last, letting his hands claw crablike across his chest and arms. "And the headaches? The nausea?" His voice cracked, out of control.

"All I can tell you, Mr. Moreland, is that's there's simply no sign—"

"You think I'm imagining all this?"

"I do suspect that your symptoms are psychosomatic in origin."

"I think you're lying!" He slammed his fist against the desk and began pacing the room. The itching was like a flame, licking up and around his body.

"Mr. Moreland!" Avildsen was abruptly stern. "I have been your doctor for over eight years. I have never been less than completely honest with you, and I have no reason to be—"

"Of course you do!" It was suddenly clear to him. "It *is* the insecticide. I know it. And you're covering for them. ExUn is part of Bund, and

so is Tabor Plaza. You work for the same people, and you're covering for them."

"That's ridiculous," Avildsen snapped. She crossed her arms and took a deep breath. "I'm sorry. I know how upset you are. And I suspected you would want a second opinion. That's why I had Dr. Gold examine you as well. We concur, Mr. Moreland. There is no physical rationale for your symptoms."

"Then what you're really saying is that you can't do anything for me. Not one damned thing. How am I supposed to work? How am I supposed to sleep?"

"What I can do is prescribe a topical ointment to cut down on the immediate risk of infection, as well as a strong sedative and antidepressant. It's potent stuff — be sure you don't exceed the dosage. But if you take the maximum, you should be able to sleep through the entire weekend if you want. Beyond that, I've arranged for you to begin seeing Dr. Bloom, here at the Plaza. A psychiatrist. He's very good, and he specializes in . . . this sort of thing. I believe he'll be able to help you where I can't."

"A psychiatrist?" The word sobered him.

"I've already cleared the appointment with Bund Insurance."

Moreland shook his head. "I don't understand."

"Mr. Moreland, I'm not qualified to render any kind of diagnosis in this

case, but I've been your doctor for a rather long time. I think I know you fairly well. And quite honestly, I've been seeing something like this coming on for quite some time. It's nothing to be embarrassed about. It's far more common than you probably realize."

She removed her glasses and polished them on the edge of her jacket. "Everybody is under a great deal of pressure these days. People are afraid, insecure, and they have every reason to be. They hide themselves away; they work at home and never go out; they try to make their homes into fortresses. But they can't keep out the news of what's going on, and there are some dangers that no one is safe from, no matter where they live or what they do to protect themselves. Sometimes the least invasion into their private little worlds — a power blackout, a newscast, a stranger entering their home — can trigger a kind of panic. Sometimes the manifestation of that panic is physical. Believe me, I've seen this happen enough times in the past few years that I know it when I see it. Dr. Bloom is very good at treating this sort of thing. I really think he can help you."

On the long drive back home, Moreland almost died. His clothing, clammy and clinging from the rain, seemed to aggravate the itching. He could hardly steer. Entering the free-

way ramp, he almost collided with a semi. There was a blaring of horns; then he found his lane and pulled clear, his heart beating wildly. As the truck roared past, he glimpsed the Bund logo emblazoned in huge red letters across its side.

He entered a patch of heavy rain and was surrounded by lightning, so constant and close he could hardly distinguish between the pounding in his head and the crashing thunder outside. He began to cry. The itching was suddenly unbearable, and he wanted to scream. He still believed it was the poison. It had to be. But Avildsen might be right. That thought filled him with an even deeper dread.

The pounding rain subsided and turned to drizzle. From the elevation of the freeway, he could see, far to the east, toward the Industrial Park, a huge column of smoke fed by flames low on the horizon. The odor of burning sulfur permeated the car. He switched on the radio. *Chemical plant sabotaged shortly after noon. . . . Four hundred dead or missing. . . . The worst disaster in the city since—*

That night, after the ointment that did nothing to soothe his welted skin, after the aspirin that failed and the light dinner of chicken broth and toast that stewed in his bowels like acid, he finally allowed himself to think about what Avildsen had said. He saw no hope in it. No hope at all. She had not said the words outright, but her implication was clear. He was

ill. Mentally ill. So severely disturbed that he was willing himself to die.

He could sense it, like a palpable darkness. The dread in the room. No matter what her tests said, Moreland knew the truth: he was dying, from the inside out. Whether it was poison or insanity. Whether she lied or spoke the truth.

He opened the bottle of sedatives and emptied it on the bed, spreading the pills in a wide arc. Large orange tablets, thirty of them. The empty bottle was covered with warning labels, bright orange like the pills: *Do not overdose. Do not operate machinery or drive while—*

Avildsen had been kind. She could not give him hope, but she had given him this. It would be enough.

He went to the kitchen and drew a large glass of water, then returned to the bedroom and stared at the scattered pills for long minutes. Orange pills on a blue sheet. He closed his eyes and saw the colors reversed, an afterimage of blue dots on an orange field. He reached blindly for the first pill and swallowed it. Then another. Then another.

The telescreen gently hummed. He ignored it and reached for another tablet.

It hummed again.

Suddenly it seemed important to answer the call. A final contact, important because it was final, just as each step he now took was magnified by its proximity to the end. He walked

to the bedside monitor and switched it on. Avildsen's face, flushed and anxious, filled the tiny screen.

"Oh, thank God. Thank God I reached you." The words tumbled out in a soft, breathless rush. "Mr. Moreland, I'm so sorry. I was wrong."

He was too light-headed to respond. Then he saw the look of horror on her face. She was staring past him, at something on the bed. He looked over his shoulder and stared with her at the scattered pills.

"Mr. Moreland, *please*, just stay where you are. Don't move. Don't do *anything*. I can't explain now, but we'll be there as quickly as we can."

"We?" Moreland shook his head, trying to clear it.

"Everything is going to be all right, Mr. Moreland. I promise you." The line went dead.

He felt dizzy and nauseous suddenly, but it was not the nausea of the past week. It was genuine, not the vague queasiness but a sensation that was wholesome by contrast, a rising revulsion in his throat. He ran to the bathroom, and for the first time since his illness had begun, he threw up.

Afterward he staggered to the living room and collapsed on the sofa. He stared at the door, not daring to move, even to scratch himself. Finally, after the longest half-hour of his life, the intercom buzzed.

Avildsen's face was stark white. Her eyes darted aimlessly about the room as she stepped inside, looking

anywhere except into Moreland's face. Behind her stood a tall, thin man in a long black raincoat, staring at him above Avildsen's head. His face was gaunt and ascetic, with high cheekbones and a long nose. He did not bother to introduce himself. His tone was blunt, his voice rasping and hoarse. "Have you taken the sedative Dr. Avildsen prescribed?"

"Yes. No — I threw it up."

"Then take one now. No, take two. *Now*, Mr. Moreland. We'll wait here."

Alone in the bedroom, Moreland stared at the pills. The sight of them made him queasy. He picked one up with trembling fingers and drank from the bathroom faucet. The capsule caught in his throat. He choked, but somehow managed to swallow, then took another.

Avildsen and the man had not moved. "Now, Mr. Moreland, if you'll come with us," the man said. "Hurry, please. I'll explain on the way."

A black sedan and driver were waiting in the lot, engine running. The three of them filed into the back seat, with Moreland in the middle. The drive began in silence. They seemed to be heading downtown. At this hour, as darkness seeped over the city, there were few cars on the streets.

Avildsen huddled against the door, staring out at the rain-swept darkness. The stranger sat with his long legs crossed, hands in his lap, cramped

despite the spaciousness of the seat. "Now, Mr. Moreland, I shall try to explain the situation."

Moreland squirmed anxiously. "When Dr. Avildsen called, it was — good news?"

"Yes, very good news. We know what's wrong with you. And you're going to be all right."

Moreland made a strangling, sobbing noise of relief. "Oh my God, if you only knew — how close I came. . . ." His nose began to run. The man offered him a handkerchief.

"To details, Mr. Moreland. You have been exposed to a very dangerous chemical. The man responsible for this appears to be one Robert Karnes, the exterminator who visited your apartment earlier this week."

"I knew it!" Moreland sobbed angrily.

"I should have seen the connection," Avildsen muttered, shaking her head, still staring out the window.

"However, you were not contaminated by the insecticide itself. ExUn Formula 811 is, as you have been told, perfectly safe."

"Then what—"

"Two weeks ago an eight-ounce canister containing a chemical with the code name Complex L was discovered missing from a Hyde Laboratories installation south of the city. Hyde is a Bund affiliate that performs research and development for a number of clients in both the public and private sectors, including ExUn.

"Complex L, Mr. Moreland, is an experimental substance that fits into no established category. It might be described as an agitator, or hallucinogen, but these terms are technically insufficient. The chief characteristic of Complex L is that it produces a state of chronic paranoia, mild by some standards but quite corrosive over time. The exact nature and degree of the reaction varies with the subject. Irrational suspicion, outbursts of violence, despondency, imaginary symptoms, and suicidal tendencies all have been observed. In your case, from what Dr. Avildsen has told me, it appears that your reactions were channeled into an immediate fear of being poisoned. The symptoms you have been experiencing are not so much psychosomatic as hallucinatory."

"And this chemical, this Complex L. . . ." Moreland spoke slowly, trying to understand. He was beginning to feel the sedative. "It was in the insecticide?"

The man nodded. "When Hyde reported that a considerable quantity of Complex L was missing, immediate spot checks were instigated at hospitals and clinics across the city. Standard procedure in such a case. By happy coincidence, one of the blood samples that Dr. Avildsen took from you this morning happened to be among those sent to Hyde for testing this afternoon. Your sample proved positive for Complex L; its presence

is very hard to detect, and no standard test would have found it. I contacted Dr. Avildsen only shortly after you left Tabor Plaza. Your insistence that you had been poisoned by the exterminator led me back to ExUn. Mr. Karnes has already been apprehended, and has freely confessed to the crime."

"But how did an exterminator have access to this Complex L?"

"We suspect that Mr. Karnes is part of a group, the existence of which has been known to us for some time, dedicated to internal sabotage within Bund and its affiliates. We hope that his interrogation will lead us back to the theft of Complex L, and provide us with the wedge that we've been needing to penetrate this group. And of course we will be able to track down Mr. Karnes's other victims for treatment." The man pensively rubbed his upper lip. "Considering the number of homes he may have serviced over the past two weeks, and the number of dosages that could be obtained from an eight-ounce canister of Complex L, there are probably dozens of unsuspecting citizens in the same situation as yourself, Mr. Moreland."

"But I don't understand. Why?"

The man shrugged. "Who can pin down such a man's motives? The most obvious would be the fact that Mr. Karnes has become partially disabled due to a series of unfortunate accidents over the years. An occupational

hazard, handling toxic substances. Of course he has been duly compensated by ExUn. But he is a bitter man."

"No, I mean — why me?"

"Indiscriminate terrorism, Mr. Moreland. The creation of an atmosphere of invisible and unpredictable menace, leading to indiscriminate fear and terror. Suspicion. Anarchy. Hysteria. That is the goal of men like Robert Karnes."

"I can't believe it. I let him into the apartment myself. He seemed to . . . like me."

"Terrible," Avildsen muttered from her corner. "Terrible. Did you hear about the explosion in the Industrial Park this afternoon?"

"But I'm going to be all right?" Moreland asked.

"Certainly," the man said. "We're headed for Hyde Laboratories. There you'll be detoxified. You'll probably spend the night, while your apartment is neutralized as well."

"You mean, more strangers in my home. But what if one of them is part of this group—"

"You're being paranoid, Mr. Moreland. It's the drug speaking."

The car merged into a lane taking them toward the westbound freeway. Moreland jerked. "Where are we going? You said Hyde Laboratories was south of town."

"Yes, but I'd like to drop by the police station first. Dr. Avildsen needs to sign some papers, and I'd like you to positively identify Mr. Karnes. On-

ly a formality, but it needs to be done immediately."

The station was a faceless gray-brick monolith that squatted among sleek glass skyscrapers. Every window was lit, despite the late hour. Inside, the man led them to a small, harshly lit cubicle. A bank of video cameras was mounted on one wall. The exterminator was already waiting for them, handcuffed and flanked by two officers in blue. He wore his gray work overalls, but his cap was missing. Moreland saw the bald spots where the wispy orange hair had fallen out in handfuls.

The man gave a signal, and the cameras began rolling.

"John Moreland, do you positively identify this man, Robert Karnes, to be the individual who entered your apartment on Tuesday of this week for the purpose of administering Ex-Un Formula 811? You may simply say yes or no."

"Yes."

The prisoner's upper lip drew back in a snarl. "Pig. Pigshit. All of you! And especially *you!*" He lurched forward, spraying Moreland's face with spittle. The guards jerked at his bound arms and pulled him back through a narrow doorway. "Corporation insect! We'll exterminate you all! Step on you, crush you like roaches!"

"He's completely insane," Avildsen whispered.

"Indeed." The man nodded gravely.

"He should see Dr. Bloom." More-

land wondered where the words had come from, then realized he had made a joke. The sedatives were making him giddy. He glanced at Avildsen, who looked away. "What will they do to him?"

The man smiled with grim satisfaction. "Surely you watch the news, Mr. Moreland. All acts of terrorism now carry an automatic death penalty. Mr. Karnes will be executed within forty-eight hours — but not, I hope, before we obtain the names of his accomplices. I think we will. The new methods of interrogation allowed under the Ripstein-Richter Act are quite effective."

In the lobby the man assigned an officer to drive Avildsen home. As she left, not bothering to say good-bye, Moreland realized she had not looked him in the eye all evening.

Back in the black sedan, drowsiness descended on him like a heavy cloak. He realized, as he gave in to the sleepiness, that his itching had almost totally subsided. They took the elevated Southeast Freeway, speeding along the deserted tarmac five stories above the ground. Within the silence of the car, the world seemed hushed and still.

"I just thought of something," Moreland said softly. He had been dozing, but was suddenly awake again.

"Yes?"

"Just what was Hyde doing with this Complex I in the first place? What possible use could it have?"

There was a long pause, broken by the man's rasping voice, slow and measured in the darkness. "We are engaged in a desperate struggle, Mr. Moreland. No weapon can be ruled out. Because *they* rule out no weapon. This was an unfortunate incident, but we can only hope the final outcome will be for the best. Naturally you'll be required to keep silent about this affair." He paused and studied his fingernails. "You know, you're a very lucky man, Mr. Moreland. Spot checks like the one we ran for the stolen Complex L are usually just a formality; they turn up nothing. This one did."

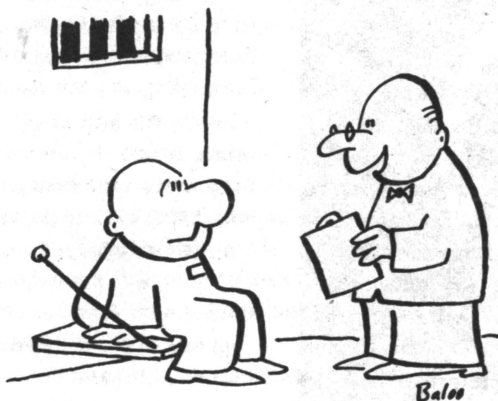
Moreland shifted uneasily in his seat. "How do I know there *is* an antidote?"

The man laughed softly. "You're being paranoid again, Mr. Moreland. Trust me."

Moreland pressed his face against the glass and looked east. The sabotaged chemical plant he had seen earlier in the day was still blazing. The flames were blue and rose high above the horizon, like a great conflagration at the edge of the world. The gigantic pillar of smoke glowed in the moonlight like the phosphorescent trunk of a mushroom cloud.

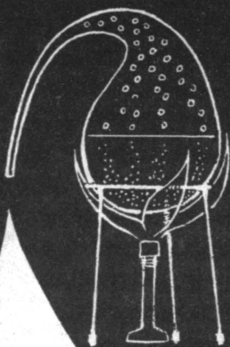
"Of course. You're right," Moreland said sleepily. "I'm going to be O.K., aren't I? Yes. Everything's going to be all right." Through half-closed eyes he saw a silent explosion inside the distant cloud of smoke, and watched a giant finger of blue flame rocket through the heart of the pillar and disperse.

"Of course, Mr. Moreland. Everything is going to be all right."



"Now, when the judge says, 'Guilty or not guilty?' I want you to scream 'Beam me up, Scotty!'"

Science



ISAAC ASIMOV

Last night I sat at the piano in the evening and tapped out tunes with one hand. I didn't have a piano available to me until the 1950's, but even at that late date I remembered perfectly well what I had been taught, in the fourth grade, about the staff, and the notes, and the sharps and flats. Beginning with that, once I had a piano, I tapped out the notes of familiar tunes (I have a good ear) and compared them with the musical notation. In this way, I gradually taught myself to read music — in a very primitive way.

So last night, as I listened to myself tap out "My Old Kentucky Home" and "The Old Folks at Home" and a few other simple ballads, *without* the music in front of me, I sighed and said to my dear wife, Janet:

"If only I had had a piano available to me as a child, when I had time to fool around with it, I would probably have banged away at it till I could play chords and produce reasonable music by ear. Someone would surely have helped me over the rough spots and by the time I was an adult I would be playing well enough to amuse myself, even if not very well in an absolute sense."

Janet (who had had piano instruction as a child and who can play well enough to amuse herself) sympathized warmly, as she always does.

But then I searched for the bright

side, since I hate feeling sorry for myself, and said, "Of course, it would have meant I would have wasted a great deal of time and would have ruined a sizable segment of my life."

This Janet quite understood, because she has long since learned that I consider any time not spent in writing as a waste (always barring the time I spend with her — if not excessive).

So I am making up for the time wasted at the piano last night by writing about that moment — and now, refraining from wasting any further time, I will continue to write, even if about something else.

We all know that we can get energy out of atomic nuclei, if we tear them apart into smaller bits (nuclear fission), or if we squash them together into larger bits (nuclear fusion).

It might occur to someone, then, that it should be possible to get infinite amounts of energy by alternately tearing nuclei apart and then squashing them together again, over and over. Unfortunately, a malevolent nature has anticipated this plan and passed laws of thermodynamics against it.

Massive nuclei can indeed be split to produce energy, but the fission products cannot be fused back to the original nuclei without re-inserting at least as much energy as had been produced in the fission.

Again, light nuclei can indeed be fused to produce energy, but the fusion products cannot be fissioned back to the original nuclei without re-inserting at least as much energy as had been produced in the fusion.

If, then, we consider the spontaneous changes in the Universe, there is a tendency for massive nuclei to undergo fission and for light nuclei to undergo fusion. In each case, the change is one way.

The massive nuclei give off energy as they gradually become less massive; the light nuclei give off energy as they gradually become more massive. In either case, nuclei are produced that have a smaller energy content than the originals; and in either case it means that the particles making up the product nuclei are less massive, on the average, than those making up the original nuclei.

If we imagine this proceeding from the massive nuclei to the less massive, and from the light nuclei to the more massive we can see that we must come across a nucleus, somewhere in between, which has a minimum energy content and a minimum average particle-mass. Such an in-between nucleus cannot give off any further energy by becoming either smaller or larger. It can undergo no further spontaneous nuclear change.

This dead-end middle is represented by the nucleus of iron-56, which is made up of 26 protons and 30 neutrons. This is the nucleus toward which all nuclear change is tending.

Let's try some figures—

The single particle of the nucleus of hydrogen-1 has mass of 1.00797. The twelve particles of the nucleus of carbon-12 have an average mass of 1.00000 (it is this average that defines the nuclear unit of mass). The sixteen particles of the nucleus of oxygen-16 have an average mass of 0.99968. And the fifty-six particles of the nucleus of iron-56 have an average mass of 0.99884. (These are small differences of mass, but even a tiny loss of mass is equivalent to a comparatively huge gain of energy.)

Working from the other end, the 238 particles in the nucleus of uranium-238 have an average mass of 1.00021. The 197 particles in the nucleus of gold-197 have an average mass of 0.99983. The 107 particles in the nucleus of silver-107 have an average mass of 0.99910. You see, then, that from both directions, the nuclei are working their way down to iron-56 as the least massive per nuclear particle, and, therefore, possessing the least energy content, and being the stablest.

In our Universe, the predominant nuclear changes are fusion in character. After the first moments of the big bang, the Universe consisted of hydrogen plus helium (with very small nuclei) and nothing more. The entire history of the Universe in all the fifteen billion years since the big bang consists of the fusion of these small nuclei to larger ones.

In the process, a substantial quantity of more massive nuclei have been formed, some more than others (depending on the rates of various fusion reactions), including a quantity of iron that is considerably greater than that of other elements of similar nuclear mass. Thus, the core of the Earth is thought to be very largely iron; and this may also be true of the cores of Venus and Mercury. Many meteorites are some 90 percent iron. All this is because iron is the dead-end middle.

To be sure, nuclei of elements more massive than that of iron have also been formed, for they exist. There are conditions, you see, in which the nuclear fusions from hydrogen to iron proceed at such an enormously explosive rate that some of the energy doesn't have time to escape and is, instead, absorbed by the iron atoms that are, in this way, kicked up the energy scale, so to speak, to nuclei as massive as uranium and even beyond.

These heavier nuclei are present in only trace quantities in the Uni-

verse as a whole. In fact, in all the fifteen billion years of the Universe's life time, only a very small fraction of the original matter of the Universe has fused even into nuclei of iron and less. Of the nuclei making up the Universe, 90 percent are still hydrogen and 9 percent are still helium. Everything else, formed by fusion, makes up 1 percent, or less, of the whole.

Why is that? It is because fusion processes do not take place easily. In order for two nuclei to fuse they must collide with considerable force — but nuclei are protected by layers of electrons under ordinary conditions. Even if the electrons are removed, the bare nuclei are all positively-charged and tend to repel each other.

In order for the fusion process to take place, therefore, a mass of hydrogen must be under great pressure and high temperature, conditions that are sufficiently extreme only in such places as the core of stars.

Enormous energies must be pumped into hydrogen atoms to get rid of the electrons and then to smash the bare nuclei (individual protons) against each other despite the repelling force of their like charges. How, then, can we speak of fusion as a "spontaneous change," when it requires so much energy to make it happen?

That is because this energy is an "energy of activation," something that serves to begin the process. Once the process of fusion is begun, energy is liberated in quantities sufficient to keep it going even though most of it is radiated outward. Fusion thus produces *much* more energy than the small amount required to start it, so that, on the whole, fusion is a spontaneous energy-producing reaction.

If this sounds too confusing, consider a friction match. Left to itself at room temperature, it would never give off energy. Strike it on a rough surface, however, and the heat of friction will raise its temperature to the point where the chemical head of the match will start to burn. The heat of the fire will then raise the surrounding materials to the point where they will burn. This can continue indefinitely, so that a match, once lit, can begin a forest fire that will level countless acres.

Even at the center of a star, the fusion process goes on comparatively smoothly and slowly. Our Sun has been fusing at its core for nearly five billion years with very little external change, and will continue doing so for at least five billion additional years.

While our Sun fuses hydrogen to helium, it is said to be on the "main

sequence." This lasts a long time because the hydrogen-to-helium fusion produces a vast amount of energy.

During all the billions of years on the main sequence, more and more helium accumulates at the Sun's core, which thus grows very slowly more massive. The accumulating gravitational field of the core grows more intense and compresses it more and more, raising its temperature and its pressure, until finally, these quantities have grown high enough to supply the necessary energy of activation to bring about the fusion of helium nuclei to still more massive nuclei.

Once helium-fusion begins, what is left of the fusion process is comparatively short, because all the fusion processes beyond helium produce only about one-fifth of the energy that the initial hydrogen-to-helium fusion produced. What's more, with helium fusion, the star begins to change its appearance drastically and is said to have "left the main sequence." For a variety of reasons, it expands mightily and, with the expansion, its surface (but not its core) cools and reddens. The star becomes a "red giant," and its life thereafter, as an object undergoing fusion, is short.

A star that has roughly the mass of our Sun will have its fusion processes brought to the pitch where its core consists chiefly of such nuclei as those of carbon, oxygen, and neon. To cause these to undergo further fusion, a temperature and pressure must be reached which the gravitational intensity of the star and its core cannot produce.

The star therefore cannot produce enough fusion energy, at this point, to keep it expanded against the remorseless inward pull of its own gravity, so it begins to contract. The contraction raises the pressure and temperature in the outer regions of the star that are still composed largely of hydrogen and helium. These regions undergo rapid fusion and are blown away in a cloud of incandescent vapor. Most of the star collapses, however, and becomes a white dwarf made up almost entirely of carbon, oxygen, and neon — no hydrogen and helium.

White dwarfs are stable objects. They are not undergoing fusion; they just slowly leak away the energy they have so that, very slowly, they cool and dim until they eventually don't radiate in the visible at all and become "black dwarfs." This process is so slow that it may be that in all the history of the Universe, no white dwarf has had a chance yet to cool all the way to a black dwarf.

But what if a star is considerably larger than our Sun, three or four, or

even twenty or thirty times as massive? The more massive a star, the more intense its gravitational field and the more tightly it can compress its core. The temperature and pressure of the core can go far higher than it ever will in our Sun. Carbon, oxygen, and neon can fuse to silicon, sulfur, argon, and all the way to iron.

But at iron the process comes to a dead halt, for iron can spontaneously undergo neither fusion nor fission. The core's production of energy fades off and the star begins to collapse. The collapse is much faster under the gravitational pull of a giant star than under that of an ordinary one, and the quantity of hydrogen and helium still existing is much greater in the giant. There is an explosion of much of the hydrogen and helium in a comparatively short time, and for a few days or weeks, the star shines with a luminosity about a billion times that of an ordinary star.

We call the result a "supernova."

The vast explosion of the supernova sends nuclei of all sizes into the interstellar spaces. Some of the nuclei are even more massive than iron, for enough energy is produced to kick an occasional iron nucleus uphill.

A supernova spreads quantities of massive nuclei through the interstellar clouds which, to begin with, consist of hydrogen and helium only. A star formed out of clouds containing such massive nuclei (our own Sun, for instance) incorporates them into its own structure. The massive nuclei also find their way into planets of such stars and into life-forms that develop on those planets.

However, the core of the exploding supernova, which contains most of the iron and other massive nuclei, shrinks to a tiny neutron star, or to a still tinier black hole. The major portion of the massive nuclei thus remains in place and never escapes into interstellar space. We might wonder, then, if such supernovas can account for the quantity of massive nuclei we find in the Universe generally.

The kind of supernova I have described, however, is not the only kind.

For the last half-century, about 400 supernovas have been studied. (All of these have been in other galaxies, for no supernova has been spotted in our own Galaxy since 1604, to the chagrin of astronomers.) These supernovas can be divided into two classes, which are called Type I and Type II.

Type I tends to be more luminous than Type II. Whereas a Type II

supernova can reach a luminosity about a billion times that of our Sun, a Type I supernova can be up to 2.5 billion times as luminous as our Sun.

If this were the only difference, we would assume that particularly large stars exploded to form a Type I supernova, whereas somewhat smaller stars exploded to form a Type II supernova. This seems so obvious that it would be very tempting to look no further.

There are other differences, however, that upset this conclusion.

For instance, the dimmer Type II supernovas are found almost always in the arms of spiral galaxies. It is precisely in those arms that one finds large concentrations of gas and dust, and it is in those arms that one therefore finds large and massive stars.

The brighter Type I supernovas, however, though sometimes found in the arms of spiral galaxies, may also be found in the central regions of those galaxies, as well as in elliptical galaxies, where there is a little dust and gas. In such gas-and-dust-free regions stars of only moderate size generally form. From their locations, then, it would seem that it is the Type II supernova that forms from the explosion of giant stars, while the Type I supernova forms from the explosion of smaller stars.

Again, a third difference is that the Type I supernovas, having passed their peak, grow dimmer in a very regular fashion, while the Type II supernovas dim irregularly. Here, too, we would expect a smaller star to behave more decorously than a larger star. The more gigantic explosion of a larger star would be expected to have a more chaotic history, with sub-explosions and so on.

From both the matter of location and from the manner of dimming, we would expect Type I supernovas to originate from smaller stars than is true of Type II supernovas. But in that case, why are Type I supernovas up to 2.5 times as luminous as Type II supernovas?

Another point! Smaller stars are invariably more common than larger stars. One would therefore expect that Type I supernovas, if they originate in smaller stars, would be more common than Type II supernovas, perhaps ten times as common. But that is not so! The two types of supernovas are about equally common.

A possible resolution of this problem arises out of the spectra of these two supernova types, which yield results that are widely different. Type II supernovas have spectra with pronounced hydrogen lines. That is to be expected of a giant star. Even if its core is choking with iron, its outer regions are rich in hydrogen, the fusion of which supplies the energy that keeps such a supernova blazing with light.

The Type I supernova, however, yields a spectrum that shows no hydrogen. Only such elements as carbon, oxygen and neon show up. But that is the makeup of white dwarfs!

Can a Type I supernova be an exploding white dwarf? In that case, why are there so few Type I supernovas? Can it be that only a minority of the white dwarfs explode so that Type I supernovas end up being no more numerous than Type II supernovas? Why should only a minority of them explode? And why should they explode at all? Haven't I said earlier in the essay that white dwarfs are very stable and slowly dim over the course of many billions of years, suffering no other change?

The solution to such questions arose out of a consideration of novas. (Not supernovas, just ordinary novas, which flare up to a luminosity of only 100,000 to 150,000 times that of the Sun.)

Such novas are much more common than supernovas, and they can't represent major explosions of a star. If they were, they would be red giants before the explosion, would be much brighter at peak explosion and would fade away just about altogether afterward. Instead, novas seem to be ordinary main-sequence stars both before and after their moderate brightening, with little if any apparent change as a result of their adventure. Indeed, a particular star can be a nova over and over again.

But then, in 1954, an American astronomer, Merle F. Walker, noted that a certain star, eventually called DQ Herculis, which had gone through a nova stage in 1934, was actually a very close binary star. It consisted of two stars so close together that they were nearly touching.

Every effort was made to study each star of the pair separately. The brighter of the two was a main sequence star, but the dimmer was a white dwarf! By the time this was determined, a number of other stars known to have gone nova at some time in their history were found to be close binaries, and in each case, it turned out that one of the pair of stars was a white dwarf.

Astronomers quickly made up their minds that it was the white dwarf of the pair that went through the nova change. The main-sequence star was the one ordinarily observed, and it went through no significant change, which was why the nova seemed to be the same before and after its brightening. The white dwarf of the pair was *not* ordinarily observed so the whole significance of the nova was lost.

But not any more. Here is what astronomers grew quickly convinced must happen—

We begin with two main-sequence stars that make up a close binary pair. The more massive a star, the more quickly it uses up the hydrogen at its core, so the more massive of the pair is therefore the first to begin to expand into a red giant. Some of its expanding material leaks over to the less massive partner which is still on the main sequence, and its life is shortened in consequence. Eventually, the red giant collapses into a white dwarf.

Some time afterward, the remaining main-sequence star, its life shortened, begins to swell into a red giant and becomes large enough for some of its mass to leak across into the neighborhood of the white dwarf. It spirals into an orbit (or "accretion disk") about the white dwarf. When enough gas has crowded into the accretion disk, the disk collapses and pours itself onto the surface of the white dwarf.

Mass falling onto the surface of a white dwarf behaves differently from that falling onto the surface of an ordinary star. The white dwarf's gravitational intensity at its surface is thousands of times greater than the gravitational intensity at the surface of a normal star. Whereas matter picked up by a normal star is merely added quietly to the star's mass, matter picked up by a white dwarf is compressed under the intensity of its surface gravity and undergoes fusion.

When the accretion disk collapses, there is, therefore, a sudden surge of light and energy, and the binary system brightens a hundred thousand times or so. Naturally, this can happen over and over again, and each time it happens, the white dwarf becomes a nova and also gains mass.

However, a white dwarf can only have a mass equal to 1.44 times the mass of the Sun. This was shown by the India-born astronomer, Subrahmanyan Chandrasekhar, in 1931, and that mass is called the "Chandrasekhar limit." (Chandrasekhar got a too-long delayed Nobel Prize in physics for this in 1983.)

A white dwarf is prevented from shrinking further by the resistance of electrons to further contraction. However, when the white dwarf passes the Chandrasekhar limit, the gravitational intensity becomes so great that the electronic resistance is shattered and a new contraction does begin.

The white dwarf shrinks with catastrophic speed, and as it does so, all the carbon, oxygen, and neon nuclei that make it up fuse, and the energy this produces tears the star *completely* apart, leaving only gaseous, dusty debris behind. It is for that reason that a Type I superno-

va, originating in a less massive star, is more luminous than a Type II supernova, originating in a much more massive star. The white dwarf explosion is total and not partial, and the explosion is much faster than that of a giant star.

And the reason the Type I supernova is not more common than it is, is because not every white dwarf explodes. Those white dwarfs that are single stars or are far from their companion stars (as the white dwarf Sirius B is far from its companion, the main-sequence Sirius A) have little or no chance of gaining mass. It is only those white dwarfs that are members of close binaries that can gain enough mass to surpass Chandrasekhar's limit.

In this way, many of the differences in the characteristics of the two types of supernovas are explained — but one difference still remained a puzzle. Why do the Type I supernovas dim in such a regular fashion, whereas the Type II supernovas dim irregularly?

In June 1983, a Type I supernova erupted in the relatively nearby galaxy, M83. It was particularly bright, and, in 1984, an astronomer named James R. Graham detected iron in faint traces in the debris of that supernova. This was the first direct indication that fusion in such a Type I supernova went all the way to iron.

Now it seemed to Graham that a Type I supernova might not be visible at all. If it fused all the way to iron, it would expand hundreds of thousands of times its original diameter so rapidly that its substance would cool down in the process to the point of giving off very little light. Yet the fusion took place, the iron was detected, and there was, despite that, an intense luminosity.

It was Graham's notion that there was some other, slower, source of energy and light, aside from just the fusion. He suggested that the material in the white dwarf fused not into iron-56 (with a nucleus containing 26 protons and 30 neutrons) but into cobalt-56 (with a nucleus containing 27 protons and 29 neutrons).

Whereas the average mass of the 56 particles in iron-56 is, as I said earlier in the article, 0.99884, that of the 56 particles in cobalt-56 is 0.99977. The slight quantity of additional energy in the cobalt-56 is so small that the slope from cobalt-56 to iron-56 is sufficiently gentle to allow the fusion to stall at cobalt-56.

The laws of thermodynamics can't be defeated altogether, however, the cobalt-56 forms, but it can't stay. it is a radioactive nucleus and each one eventually gives off a positron and a gamma ray. The loss of a

positron converts a proton to a neutron so that each cobalt-56 nucleus becomes another nucleus with one fewer proton and one additional neutron — in short, a nucleus of iron-56. It is this radioactive change of an entire star's supply of cobalt-56 that provides the energy that produces the luminosity we see in a Type I supernova.

Is there any evidence at all to back up this suggestion? Yes, though the general fusion of nuclei from oxygen all the way up to cobalt may take a matter of only seconds, the decay of cobalt-56 to iron-56 is much more gradual, for cobalt-56 has a half-life of 77 days. If it is the radioactive decay of cobalt-56 that supplies the luminosity of a Type I supernova, then that luminosity ought to decline very regularly just as the radioactivity does. And, apparently, a Type I supernova dims regularly with a half-life of close to 77 days, casting strong suspicion on cobalt-56.

It follows then that although massive nuclei are injected into interstellar matter by both types of supernovas, the most massive ones such as iron and beyond are mostly preserved in the shrunken neutron stars and black holes produced by Type II supernovas, but are spread broadcast along with everything else by the total explosions of Type I supernovas.

It follows then that most of the iron that has found its way into the Earth's core and its surface rocks — and into our own blood, as well — once existed in white dwarfs that exploded.



Here is an inventive story about a one-time star of Broadway and Hollywood who is trapped in a series of drug-induced trips into his past, where the memories are not all good. David Brin wrote "Thor Meets Captain America" (July 1986); his brother Daniel is a thirty-year-old newspaperman living in Los Angeles.

A Stage of Memory

BY

DAVID BRIN and DANIEL BRIN

1.

A fine crystalline powder lay scattered along the cracked molding between the mattress and the wall. The tiny white grains met crumpled tissues and hairballs under the lip of a dingy fitted sheet. They sparkled incongruously along a thin trail across the floor of Derek's shabby room, reflecting where, it seemed to Derek, there wasn't any light.

The ripped window shade cast a jagged knife of daylight on faded *Variety* clippings taped to the opposite wall. The outline looked like the tapering gap between a pair of legs . . . the legs of a runner in mid-stretch, making time against the wall.

Derek Blakeney contemplated the runner.

Headless, torsoless, it had started over near his closet, narrow and slow. As the afternoon wore on, the shadow widened and the jogger seemed to catch its stride, legs reaching like a steeplechaser's. Its progress across the wall became terrific . . . a yard, at least, in the past twenty minutes.

At last Pheiddipides crossed the finish line and expired in the shadow of the closet door.

Evening. A time for decision.

He had known all along what his choice would be. Derek's hands trembled as he reached for the shoe box by the foot of the bed, his unbuttoned cuffs laying bare an uneven chain of needle tracks.

Bless the Mercy Law, he contemplated as he opened the box and took out a sterilized package. *Bless the legislators who had legalized the paraphernalia, the syringes and needles,*

so those on the low road didn't have to share it with hepatitis and tetanus.

He broke the sealed wrapper and pushed the bright needle through the rubber cap of a tiny bottle of amber fluid.

Bless those who had legalized the new drugs, so an addict needn't commit crimes to support his slow road to hell. He didn't have to drag others with him anymore.

He wrapped rubber tubing around his arm and held it tight with his teeth as he poised the needle's tip over the chosen spot. Derek's way of dealing with short-term pain was to make a dramatic moment of it. When he pierced the protruding vein, his face contorted as if to highlight the pain for the back-row balcony.

Even an out-of-work actor had his pride. Derek had never believed in cheating those in the cheap seats, even if some selfish front-row critic thought one was hamming it up a bit.

A small bead of milky liquid welled from the entry hole as he withdrew the syringe and laid it aside. Derek sighed and sank back against his pillow. If he had calculated it right, this time he would go *back*! This time he'd return to the good days, long before. . . .

He closed his eyes as a cool numbness spread up his arm and across his chest. His scalp tingled.

Derek could feel here and now start to slip away. He tried to concen-

trate, determined not to let *this* trip get away from him!

Envision a small frame house on Sycamore Street, he told himself, in Albany, New York. . . .

Sycamore Street, so long ago . . . Mother would be cooking a Sunday supper, Father is reading the paper, and my old room is a clutter of plastic airplane models, touching the air with a faintly heady scent of glue.

The numbness spread down his jaw and spine, and he willed himself back through the files of his cortex, back to Sycamore Street, back to being twelve years old again . . . back to where a familiar female voice was about to call out. . . .

"Supper's ready!"

It had worked! The new dose had worked! Those were exactly the words he had willed his mother. . . .

"Come on, Lothario! Get your ass out herè. I've whipped together a simple, nutritious meal for you. You've got ten minutes to eat and still get to the theater on time!"

The alto voice carried a quaver of emotion, barely suppressed. Derek realized with a sinking feeling that it was *not* his mother, after all.

His eyes opened. The drug had worked. The dingy little fleabag room had been replaced by much richer surroundings. But there were no plastic model airplanes. Rather, drifting glass and metal mobiles reflected opal gleams from two garish lava lamps. A

row of plaques and statuettes glittered in a mahogany ego-shrine across from the bed. Underneath he felt the warm vibrations of an expensive auto-massage oil-bed.

Derek felt that strange/familiar pressure as his midbrain surged forward to take over. From now on he would be only an observer, unable even to make his eyes blink while the triggered memories replayed perfectly, vividly, out of his control.

Derek felt a silent, internal cry of despair. *This is where I left off last time! I didn't want to come back here. This is too close to the present. I wanted to go back to when I was twelve!*

He heard footsteps approach. The door slid swiftly along its rails to bang as it hit the stops. A bright trapezoid of light spilled from the hallway, eclipsed by a slender shadow.

"Well, Derek? Are you going to shave that famous puss and get dressed for the show? Or shall I call Peter and tell him to get your understudy ready again?"

Even the injected form of the damned drug is sequential! I knew it. The thrice-damned stuff takes me forward, one step at a time. I have no choice but to start off each trip reliving where the last one ended!

"Derek?" the figure in the doorway demanded.

"I'll be out in a frigging minute," his midbrain answered — controlling

his voice — making it happen exactly as it had three years ago. The playback was adamant, unchangeable.

"Shit!" he growled. "A guy can't even enjoy a little grass in peace, in his own goddamn apartment." He had to fight the cannabis languor to pull himself up to one elbow, squinting at the brightness from the hall.

"And speaking of piece, where does a bird like you get off talking to me like that? I picked you out of a bloody *chorus line*, gave you your first frigging break, and the best frigging time in your life!"

Tall and slender, the woman in the doorway had braided black hair and a dancer's body. He knew that body and the smell of that hair as well as he knew his own. Right now he radiated a loathing tailored by his knowledge of her, enjoying the carefully chosen words with an actor's pride.

"If I weren't so goddamn stoned, I'd show you what an ungrateful bitch like you can do with her frigging nagging!"

There was a long silence. Then the woman nodded resignedly.

"Right," she said softly. Then, with a note of determination: "All right, Derek. Have it your own way. I've taken on a wife's duties, and for more than a year, that has included picking up after your increasingly sloppy body and mind. I thought it worthwhile, and imagined you'd get over your grief like a man. But this time I'm tak-

ing you at your word.

"Thanks for the break, Derek. You did get me that first part, and you've paid the rent. I'll take only my clothes with me, and I'll have my agent forward yours a percentage of my next gig."

She paused, as if half hoping against hope that he would speak. But he did not. His eyes were unfocused, following the shimmering globs in the lava lamp.

"Good-bye Derek."

He had to shade his eyes from the light as her eclipse vanished. He lay back in a floating torpor, and a short time later heard the front door slam.

Good frigging riddance, he thought. I can pick up any one of a dozen young things after the show tonight without her around. Life is definitely about to take a turn for the better!

He turned to pick up his smoldering reefer from the ashtray, totally oblivious to a little voice from another time, which cried out plaintively, hopelessly, "*Melissa, please . . . don't go. . . .*"

2.

The waiting room was stark and depressing . . . paint peeling under sharp fluorescents. The pungency of disinfectant failed to disguise the distinct aroma of urine. Every now and then some waiting client fell into a fit

of dispirited coughing. Nobody talked.

Derek hunched in a cracked corner seat, hoping to avoid being noticed. Not that many recognized Derek Blakeney anymore. It had been more than two years since the last spate of scandals and scathing reviews had banished him from the theater columns.

The only serious threat to his apathetic spiral had come when a certain critic compassionately eulogized "a lost giant of the stage." Derek had tried to build a rage over it, but torpidity had prevailed in the end. Now, thirty pounds lighter and indifferently washed, it was unlikely anyone would even recognize a onetime star of Broadway and Hollywood. He was probably safe.

A gaunt woman in a white smock periodically emerged to call out numbers. Clients followed her one at a time to a row of cubbyholes against the wall. From the booths came a low mutter of alternating wheedling and officialese. Derek could easily overhear snatches of conversation.

". . . You won't get any more Tripartim until your amino acid balance is better, Mr. Saunders. . . . How? Why, by improving your diet, of course. . . ."

And another.

". . . Here is your allotment, Mrs. Fine. No, first you sign here. Yes, here. And you must drink this vitamin supplement. . . . I've already explained, Mrs. Fine. The government doesn't

subsidize your habit because it's your *right*, but in order to drive the Black Chemists out of business. We can undercharge them and see to it you have every chance to kick it if you decide to. Part of the deal is making sure you get the nutritional. . . ."

Derek closed his eyes. The Liberal-Libertarian coalition had trounced the old Republicans and Democrats in the last election, and the Drug Centers were among their first steps on taking office. It had been a good move. Too bad the Libertarians were so stingy, though, and the Liberals so damn sanctimonious! If only they'd just give over the doses and shut their bloody. . . .

"Number eighty-seven!" The nurse's sharp voice made Derek feel brittle. But it was his number, at last! He stood up.

"I'm number eighty-seven."

The nurse's look seemed to say that what she saw was simultaneously both pitiable and somehow vaguely loathsome. "To to station twelve, please," she said, referring to her clipboard. "Ms. Sanchez has your chart."

Derek shook his head. "I wish to see Dr. Bettide. It is a matter of some urgency, requiring the attention of someone with his high expertise."

The woman looked up, surprised. Derek felt a moment's satisfaction. He might look like a derelict, but the *voice* was still Derek Blakeney's. It commanded attention.

"Dr. Bettide is very busy," the nurse began uncertainly. "He's good enough to volunteer his time as it is. We send him only referrals from. . . ."

"Just convey him my name, if you please." He handed her one of his last few cards, certain he could recover it. "The doctor will see me; I am certain of it." He smiled, a relaxed expression of assurance and patience.

"Well. . . ." She blushed slightly and decided. "Wait here, please. I'll ask Dr. Bettide if he'll see you."

When she had gone, Derek let his expression sag again. Without an audience, he folded in upon himself.

Lord, he thought. I hate this overlit, stinking pesthole. I hate the world for having such places in it. And most of all I hate having to beg for the stuff I need in order to get the hell *out* of this goddamn turn-of-the-century world.

It isn't *fair*. All I want to do is go home again! Is that too much to ask? Frigging scientists work wonders these days. Why can't they just send me home again?

3.

It's not fair, I tell you. The injection and the new dose should have taken me back to age twelve! Not thirty-five, but twelve! What's the *matter* with the damned stuff?"

It never occurred to Derek to present a false face to Dr. Melniss

Bettide. He acted the age he wanted to be in the presence of the man he hoped would make it possible.

A small, dark man, Dr. Bettide regarded Derek through thick-lensed glasses. Derek grew uncomfortable under the physician's unblinking stare. At last Bettide pressed a button on his intercom.

"Steve, please bring in a double shot of health supplement 4."

"Yes, Doctor."

"Hey! I don't want vitamins! I want. . . ."

Bettide silenced Derek with a bored wave. "And Steve, please also bring me a carton of the new samples of Temporin B."

Now that was different! A new *type* of Temporin? Of Time-Jizz? The possibilities were exciting.

Bettide examined Derek's file. "You've been to group therapy regularly, I see."

"They won't give you a drug card if you don't go. It's worth sitting around with a bunch of whining marks for an hour a week, in order not to have to go to the Black Chemists for the stuff."

"Hmmm, yes. But you're still refusing individual treatment?"

"So what? It's not mandatory. Why should I go and spill my guts to some shrink? There's nothing wrong with me."

Derek stopped abruptly, blinking as a flashback hit — a brief, sudden image of a trapezoid of light, then the

sound of a slamming door. . . .

He looked down and spoke again in a lower tone. "At least, there's nothing wrong with me that the right change of environment wouldn't cure," he muttered.

Dr. Bettide made an entry in Derek's file, a sniff his only comment. Derek shrugged. So the man saw through his sophistries. At least Bettide never lectured like a lot of Liberals would. He suspected the doctor was a Libertarian.

Yeah. Let 'em go to hell however they want to. It's our own choice, after all.

A pharmacology aide walked in and put down a plastic-capped beaker of orange fluid. Next to it he placed a cardboard box that clinked, the sound of many small bottles. Derek inspected his fingernails as the assistant passed out of the office, ignoring the aide's expression of bored contempt.

"So what's this new type of Time-Jizz, Doctor? Will it work, at last?"

"Drink." Bettide gestured at the beaker without looking up. He took out a key and unlocked his briefcase, removing a small black ledger.

Derek grimaced and reached for the vitamin supplement, sighing for effect as he pried off the plastic cover. He drank the orange-flavored concoction, knowing Bettide wouldn't help him until it was all gone.

At last he put down the beaker and licked the orange coating from

his ragged mustache. "Have they found any more cases like me, Doctor?" For a change his voice was serious, earnest.

"A few," Bettide answered non-committally, still writing in the small black book.

"Well? Have they found out why some of us get stuck in sequential time trips, instead of just accessing the memories we want at will?"

Bettide closed the book and looked up. "No, Derek. We haven't. But look on the bright side. At least you don't suffer the worst syndrome. Some Temporin users with hidden masochistic tendencies send themselves right off to the worst moments of their lives. A few get into flashback loops where many times each day they relive those episodes in vivid detail, with or without the drug."

Derek blinked. "That's terrible! But. . . ."

A crafty look spread across his face. "Oh, I get it. That's one of those aversion stories, isn't it? Part of trying to get your clients off of the very drugs you pass out. Pretty clever. You almost scared me this time."

Bettide shrugged. "Have it your own way, Derek. As to your problem of sequential access, I believe we might have a possible solution."

For once Derek had no comment. He edged forward in his seat.

"Your dilemma," Bettide said, "is to *choose* the memory to be accessed through the drug. Other than volition

—which seems to be locked in your case — the only other known way would be to use electronic probing. Unfortunately, that method is out."

"Why?"

"Because the government is not in the business of pandering to destructive and expensive habits that don't already have a criminal purveyor! We provide you Temporin to keep you out of the clutches of the Black Chemists and other underworld sources, and to see that you have every opportunity to freely choose a productive life-style again."

"But if this electrical gizmo is the only way. . . ."

"There might be another." Bettide took off his glasses and wiped them. "It's untried, and *I* certainly wouldn't attempt it. But then, I would never have gotten myself in your fix in the first place. Once again I ask you to accept the coalition's offer to send you to an ecology camp for a rest and work cure, instead." Bettide made his entreaty as if he knew what the answer would be in advance.

Derek felt tense under his scalp. He shook his head vigorously, as if to drive out a threatening uncertainty. "No! . . . If you won't help me, I'll go to the Black Chemists," he threatened. "I swear, I'll. . . ."

"Oh, stop." Bettide sighed in tired surrender.

Derek's headache vanished just as quickly. "O.K." He brightened. "What do we do?"

"We'll try you out on a potent new version of Temporin B the Black Chemists have just developed and we've managed to resynthesize. One hit drives the reliving process about five times as long, on average, as the old drug, and at three times the subjective/objective rate."

"But . . . but that won't help me get back to where I want to go. It'll only make the sequences go by faster!"

"True. However, some believe your strange type of locked, sequential recall will break down as more recent memories are accessed. You'll have revisited your entire life, so to speak, and no long-term memory will have greater excitation potential than any other."

"I'll have free access again after that?"

"That's my best guess, Derek."

Derek chewed on one end of his mustache. "I'll have to go through some pretty rotten times," he muttered.

"Quickly, yes." Bettide nodded.

"I don't know." Derek's brow knotted.

Bettide closed the file folder. "Well, our time is up. If you can't decide now, we'll just make an appointment for next week."

Derek looked up quickly. "I'll do it! Please. Can we start now?"

Bettide shrugged. He opened the cardboard box and put about a dozen small bottles into a paper bag.

"Sign here." He indicated a release form.

Derek scribbled his signature and took the bottles. They clinked as he rose to go. "Thanks, Doc. I know you're trying to help. Maybe if I can just get some peace for a while — get back to Sycamore Street for a rest — I'll be able to think about things. . . ."

Bettide nodded reservedly. But, as Derek opened the door to leave, the doctor said, "I saw *Realm of Magic* on the Late Show last week, Derek. I enjoyed it a great deal. You were very good in that film, even if you were better on the stage."

Derek half turned, but couldn't make himself meet the physician's eyes. He nodded, clutching the bag, and left quickly without shutting the door behind him.

4.

The amber-white fluid enticed, and he sought salvation in the past.

Enola Gay closed before summer. He hadn't much liked the part anyway. It made him nervous. Claude Eatherly, the protagonist, was a hard mind to get into.

No matter. When Peter Tiersjens hired a fresh-faced kid for the road show, that suited Derek fine. He was getting sick of Peter and his damned sanctimony anyway. At the last cast party, the old geek tried to give Derek some "fatherly advice." Derek

fumed in his cups.

"The Catskills? The fucking Catskills? Jesus, Peter! What kind of shit have you got for brains? What would I do in the friggin' Catskills over the whole summer? I went there as a kid, and all I can remember's being bored enough to kill myself, while my mother and father listened to accordion music and the sound of their arteries hardening!"

Derek tossed back the last of his drink. He took a cube from the ice chest on his dressing table and dropped it into the glass. His hands shook a little as he poured two jiggers of gin after it, spilling some onto the marble tabletop.

The sounds of the cast party could be heard through the crack in the door. Old Peter Tiersjens sat back in a folding chair, his feet propped up on a box of costumes. He took off his wire-rimmed glasses and pinched the bridge of his nose.

"Derek, I am thinking of you. What will you do now that the show has closed? Do you have any other offers? Do you have savings?"

Derek shrugged. "My agent says he's looking over the off-season possibilities. But most of them are out in the sticks, so maybe I'll just stay in the city this summer. Who knows? I may get a call from the Coast for another movie." Derek swallowed at his drink. Already the evening was shimmering in a fine inebriated gloss—like gauze over a camera lens. He

would be grateful for the fog later, when he went out to select a bed partner from the groupies. The Vaseline vagueness would make the staliest teenybopper shine like Fay Wray. It was easy to forget Melissa when he was loaded.

"Derek. . . ." There was a long pause as Tiersjens grew uncharacteristically reticent. Derek experienced the strangest sense of *déjà vu*, almost as if he knew the director's very words before they were spoken.

"Derek, there will be no offers from Hollywood. Your name is mud out there, has been ever since you walked out on *Tunnel in the Sky*. Who would hire you after that? To be honest, Derek, your taking the Catskills job wouldn't be a great favor to me. It's my way of trying, one last time, to help you."

Derek sneered. "Like you *helped* me by hiring that snot-nosed Todd Chestner to play Eatherly on the road? Dumping me in the process?"

"Don't blame that on Todd. The kid idolizes you, Derek. I did it for the good of the show. Todd's been covering for you half of the time anyway. Anyone but me would have replaced you three months ago.

"But Derek, I am willing to give you one more go, for old times' sake. *Take* the Catskills job, and get off this cycle of self-destruction while there's still a chance!"

For a moment, Derek found himself captured by the man's intensity.

Peter Tiersjens could take a platoon of blasé actors and light the fire of Melpomene inside them with a few words. "Derek," he urged. "You used to say there was nothing more contemptible than the artist who lost himself on the Edge. Now you are sacrificing everything on the altar of Bacchus. 'Tis mad idolatry to make the service greater than the god!" "

In the half-drunken fog, Derek's belligerent side won a brief but bitter struggle.

" 'Cry, Troyans, Cry!' " He mocked the older man, quoting from the same play. "Cassandra, you can go to hell." He stood up and walked unsteadily to the door. On the way he kicked Peter's chair. His fists clenched in pleasure at the resultant shout and crash, and he left without looking back.

Later he had the satisfaction of punching Todd Chestner in his fatuous, earnest young face. It would take makeup an extra half hour to get the twerp ready during the first week of the road show. That was some satisfaction, at least.

After that, though, even the groupies drew back. And that evening he went home alone.

"*Uh!*"

Derek awakened suddenly from the drug-induced playback. He shuddered, and for a long time just lay there on the unkempt mattress, breathing.

The new drug certainly did re-

lease a charged, totally vivid experience. It also drew out the playbacks more rapidly.

All he had to do was somehow endure the next three years' worth of memory recall. *That's all*. At this rate it shouldn't take more than a couple weeks, real time. A few more weeks; then, if Bettide was right, it would be back to the golden years!

Derek had come to believe the drug did more than simply play back chemical memories inscribed in the brain. He was half convinced it actually took one *back*. Personally. And when the bad times were through, he would be free once more to cycle back to childhood . . . to model airplanes and long summer afternoons . . . to ice cream and the sweetness of precocious first love . . . to a time when there were no regrets.

He got up, stretching to ease a crick in his back, and slipped a Diet-Perf dinner into the rusty old microwave. He barely tasted the meal when he spooned it down.

Derek got out the log Dr. Bettide had given him. Success depended on the physician's goodwill, so he wrote down the times and places he had returned to . . . avoiding mention of the nasty little personal details. They were irrelevant anyway.

He watched the Late Show on TV until, at last, sleep came. But then came the inevitable struggle with his dreams, trying to make them conform. But they were not pliant, and

had their way with him.

"Blakeney, just who do you think you are? This is the third time you've come in late and stoned, and gotten belligerent with the audience! We may be a small-time company, but we've got our reputations to consider. . . ."

"Reputations!" Derek sniffed noisily. He had been doing a fair amount of coke lately, and his sinuses stung. That only made him angrier. "Reputations, my eye! You're a bunch of flea-bitten juveniles pandering to tourists in a little uptown improv club, calling yourselves actors. Here I am, willing to lend you my name and my services, and you talk to me about *reputations*?"

"Why, you conceited windbag!" One of the young men had to be physically restrained. Derek grinned as the others held the fellow back, knowing they would never dare back up their bluster with physical force.

"Conceit, my young friend, is a matter of interpretation. It's all relative. haven't you learned that yet?" He rolled his eyes heavenward. "I try so hard to pass on what I know, yet the next generation is obdurate!"

One of the older youths stepped before Derek.

"Yes, Mr. Blakeney, you have taught us a thing or two."

Derek smiled back benignly. But the fellow was not apologizing.

"You've given a bunch of hungry

and talented young actors an object lesson in the dangers of success, Mr. Blakeney. You've shown us how far the mighty can fall, when arrogance substitutes for self-respect, and cynicism for hope. For teaching us that, we'll slice you your percentage of the rest of the shows this month. However, it will not be necessary for you to return."

Derek snarled. "You can't do that! We have a contract!"

"We also have witnesses to your foul-mouthed abuse of paying customers, Mr. Blakeney. You can treat us like dirt beneath your feet, but mistreating the marks is something any court in the land will recognize as just cause. Sue us, or send your agent around. But don't show up in person, or we'll call the cops."

"Yeah," one of the girls said. "And if that doesn't work, we'll break your arm!"

Derek stood very still, his breath hissing angrily through clenched teeth. He dragged his memory for an appropriate quotation . . . something Shakespearean and devastatingly apropos to the ingratitude and treachery of youth.

He couldn't come up with anything.

His mind was blank!

The blood drained out of his face, and he clutched the stair rail. With a titanic effort he straightened his shoulders and turned so the young actors wouldn't see. He was out on

the sidewalk before he trusted himself to breathe again.

I couldn't improvise a comeback to devastate those cretins! What's the matter with me?

For an instant an unwelcome idea dominated his thoughts . . . the possibility that Peter had been right, that these punks were right.

If I can't outwit fools, maybe I *have* been slipping. I thought I was teasing the marks because they deserved it, but have I been belligerent to cover the fact that I can't do improv anymore?

The thought seared. It was too hot to be allowed to settle in. He drove it out by thinking about . . .
. . . about getting high.

Yeah. Somewhere there must be a drug to help. Uppers did the trick when there was work to do. Downers helped him sleep. Somewhere there had to be a drug that'd bring back happiness.

All I need is a little peace, a little happiness. Then I could get my thoughts together. Make a plan. There oughta be a jizz to help me get through the summer. I'll straighten out this fall.

Melissa won't approve, of course. She'll want me to clean up my act overnight—

What am I saying? Melissa's been gone almost a year!

He felt very odd, like a man standing at a crossroads, undecided over which way to go and afraid that it was

already too late to turn back. That sense of *déjà vu* returned again, filling him with a dreadful feeling that he had been this way before, and was doomed to choose wrong again. And again.

Unsteadily, he walked down Forty-seventh Street, past the shops and the pedicabs, and the occasional licensed automobile. Flywheel jitneys hummed by, picking up tourists on their way to the Village or downtown.

Slowly, the unease began to dissipate. It was summer in New York. Hardly a time and place for heavy thinking.

I'll go see Barney, he decided. Maybe he's heard of something on the street. Something to get me up.

"They call it Time-Jizz." Barney handed Derek a packet of white powder. "It's the latest thing out o' the Black Chemists. Man, this time they've really stolen a march on the gov'mint. Time-jizz is the biggest thing there is now."

"What it is, man?" Derek unconsciously adopted the dialect of his supplier, minicking the street tempo perfectly.

"Mooch-hooch, baby. With this stuff you can go back to any limber scene you ever had, and *relive* it. I mean, I tried it an' it works. I went back to the best lay I ever had, and man, I found out my memory weren't exaggeratin' one bit. Mmmm-mmm."

Derek fingered the packet. "I dun-

no, Barney. A new blam-scam from the Black Chemists . . . I don't want no junkie-monkey now."

"Aw, the shrinks have had this stuff f'years!" The dealer soothed: "Word is, it's safe. No monkey, for sure, babe. And you get to choose the time and place you go back and visit! Shoot. A deal like that makes you think them Black Chemists were really brothers after all, and not a bunch of old white syndicate clowns with Pee hache Dees."

The powder glistened in the light from the bare bulb. Derek stared at it.

"Anywhere or anytime I wanted. . . ." he murmured.

"Yeah, man, you could go back to when you were suckin' Baby Ruths and peekin' up girls' dresses."

"My childhood was a boring crock," Derek snickered. "Still," he added thoughtfully. "It had its moments. Anyway, as the serpent used to say, Why not?"

He looked up and saw the dealer was staring at him. "George Bernard Shaw," he explained. "From *Back to Methuselah*."

"Sure, man," Barney shrugged. "anything you say. Now about the price. Startin' out, I can offer you a real sweet deal. . . ."

Derek came home to his cheap studio to find the mail slot filled with bills and with an irate note from his landlord. He shut the door with his foot and let the envelopes slip to the

floor. He stirred a can of soup into a pan and stirred it over a hot plate. He contemplated a small vial of amber fluid, one of Bettide's ampoules, on the counter in front of him.

Derek felt trapped. He had been accessing increasingly recent memories, more and more painful to face. He wasn't sure he could go through the final two years' worth of total recall.

He would be gambling the pain against Dr. Bettide's hypothetical "breakthrough" . . . when all the storage in his mind would supposedly be his again, reachable at will.

Reliving that episode with the kids at the improv — and then his first purchase of Time-Jizz from Dealer Barney — had driven him away from the drug for a few days. He had walked around in a depressed haze, getting stoned on older, less terrifying, highs.

He hung around a few theaters, milking a few tourists who recognized him. He ignored their whispers to each other after he finished signing autographs.

Finally he found himself at the office of Frank Furtess, his old agent. Old Frankfurter had looked genuinely surprised to see him. Then Derek remembered. He had fired Furtess more than a year ago, using nearly every piece of invective in the book.

Derek realized that he had adopted a frame of reference twenty months old, and had momentarily forgotten the incident! By then he had already

shaken the agent's hand; he had to play the scene to its end.

The meeting was chilly. Furtess promised to look into a few possibilities. Derek wrote down his landlady's phone number, but he figured the man would throw it away the moment he left.

Now, to come home and find all these bills, and royalties so scant these days. . . .

It was late afternoon, and once again the ripped window shade cast the legs of a runner on the wall. The jogger's slow, mute progress was a tale of perseverance.

Derek plucked up the ampoule and moved over to the mattress on the dusty floor. He broke the seal and held the needle to his arm. . . . He . . .

. . . mixed the powder carefully in his Fifth Avenue apartment. In the light from the lava lamp, he poured the mixture into a glass and drank it, as Barney had told him to do.

He sat back in the relaxing hum of his vibro-chair and avoided thinking about how he was going to keep up the rent on this expensive flat. Instead he tried to focus on some event in his childhood. Almost anything would do for a test of the new drug.

Ah, he thought. Model making with Douglas Kee, the gardener's boy! We did have fun, didn't we? We were pals. How old was I then, ten years old?

He closed his eyes as a pleasant

numbness washed over him. He thought about glue, and plastic, and little sticky decals . . .

. . . and found himself laughing!

The laughter was high and clear. It startled him, but he couldn't stop! He was no longer in control of his body. Someone *else* was in command.

In a sudden flow of visual images, he saw that he was no longer in his apartment. Sunlight streamed in to fall on a cracked linoleum floor. Dust gathered in clumps under worn furniture and stacks of old newspapers. In one corner of the room, a calico kitten played with a ball of string. Through a half-opened door came a steady breeze of sun-warmed fresh air.

But he caught all of this out of a corner of his field of vision. At the moment he could not make his eyes shift from a pile of plastic odds and ends on the floor in front of him. He caught a glimpse of his own hands and was momentarily shaken by how small they were. They moved nimbly among the plastic bits, fitting them together experimentally.

"Maybe we could glue that extra piece of the ol' *Cutty Sark* onto here and make a radar antenna out of it!"

Derek's gaze shifted to his left. Next to him was a small boy with Oriental features.

And yet he didn't look so very small right now. In fact, the boy was larger than himself!

Once again Derek found himself laughing, high and uninhibited. "Sure, stick a mast of a sailing ship on an intergalactic warp vessel. Why not?"

The voice was unmistakably his own. He felt his own mouth and larynx form the words. But it was a smaller voice, and a younger, more intense volition that shaped it. The adult part of himself began to understand.

I'm back to when I was ten. It worked. The drug worked!

Now he was getting more than physical sensations. The thoughts of that happy ten-year-old came rushing in, threatening to wash all sense of adulthood aside.

He tried to make the flow two-way . . . to communicate with the boy. But it was hopeless. The child was only a memory, playing back now in vivid detail. It could not be changed.

Gradually, all awareness of being anything but the boy fell away, as he learned to let go and just observe.

"Hey! Hey! I got it!" Derek-the-child shouted. Let's put a glob of glue over this guy's head and call it a space helmet!"

"Naw. That's a Civil War Union guy. What'd he be doing with a space helmet?"

"Well, with the glue on his head, who could tell?" Derek giggled. "And *he* wouldn't care. Not with a ton of glue to sniff!"

The boys laughed together. *Derek* laughed along.

5.

I want to back to go the old drug now. I want to slow down again."

Dr. Bettide jotted a comment in his little black notebook.

"Have you finished reviewing your memories up to the present?"

"No. I don't want to do that now."

"Why? I thought your objective was to make available, once more, the memories of childhood."

Derek grinned. "I've *done* that!"

Bettide frowned. "I'm not certain I understand."

"It's simple, really. I've finally started reliving the point, eighteen months ago, when I first started taking the drug."

"Yes? And?"

"And now I'm recalling perfect memories of recalling perfect memories of childhood!"

Bettide stared at him, blinking first in confusion, then in growing amazement. Derek relished it.

I must be the first, he realized. The first ever to have done this. Why that makes me some kind of explorer, doesn't it? An explorer of inner space?

"But Derek, you'll also be reliving some of the worst times of your life—the eviction, for instance, and the lawsuits."

Derek shrugged. "Most of that time I was in a Time-Jizz stupor. And it felt like I was in the past six to ten hours for every hour in the present. It was worth it then; it'll be worth it again!"

Bettide frowned. "I must think about this, Derek. There may be consequences neither of us had considered. I'd like to have you come out to my institute for some tests. . . ."

Derek shook his head. "Uh-uh. You can't force me. I'm grateful, Doctor. Accidentally you've given me the key. But if you stop helping me, I'll go to the Black Chemists."

"Derek. . . ."

"You think about it, Doc." Derek got up, knowing he had Bettide by the short hairs. Obviously, the physician wanted desperately to keep Derek in sight, to observe this new twist.

"I'll come back in a week, Dr. Bettide. If you have refills ready for me, I'll tell you about it." He couldn't help letting a little Vincent Price slip into his voice. "Otherwise. . . ."

Involuntarily, Bettide shivered. Derek laughed and swept out of the office.

"Darling, don't go into the water! You'll get your cast wet!"

"Aw, Mom!"

"I mean it!"

Derek shrugged and kicked a stone along the sandy bank of the lake. He savored the feeling of being unjustly persecuted, though at the root of it

he knew his mother was right. This way, though, he could nurse just a little more mileage out of his broken arm.

Actually, it had been frightening when it happened. He had fractured it waterskiing early in the summer. But now it seemed like the best thing that ever happened to him. For two weeks all the girls his age whose families were summering by the lake had competed to fuss over him.

Tonight that precocious little bundle, Jennifer Smythe, was going to take him to auditions at the Junior Theater in Big Bear. He hadn't wanted to go at first, but when she began making promises about what they would do afterward, he grew more interested.

Who knows? Derek mused. Maybe they'll offer me a part in the play. Now wouldn't that be something?

High overhead, a big Boeing 787 growled across the sky. At one time, Derek had thought he might want to be a pilot, or an astronaut. Now he watched the plane cynically. That was patsy's work. There had to be something better — something that would make people want to pay him just to be himself. . . .

He smiled as he thought of Jennifer. The sunshine was warm on his well-tanned back. He felt, as he often did, on the verge of a great adventure. Anticipation was delicious.

"Oh Derek! You were wonderful!"

"Was I really?"

"You heard Mrs. Abell. She's re-writing the male lead so he has a broken arm! And here you stand, pretending you aren't interested!"

"Oh, sure I am," he laughed. "Only right now I'm interested in something else even more!"

Jennifer giggled and took his hand. "Come on. I know a place by the boat sheds!"

"Mr. Blakeney. You owe four months' payments on your condominium. If you don't remit within a week, we'll be forced to finalize the foreclosure proceedings. . . ."

Derek slammed the door in the attorney's face. "I'll send some money when my next royalty check comes in!" he shouted through the door. Then he turned away and forgot the matter. He had more important problems than some jerk worried about late rent.

He had run out of Time-Jizz. And Barney, his supplier, had jacked up the prices beyond what he could afford. "It's the Black Chemists," the dealer had complained. "They upped the price on me. I gotta pass it on."

Derek knew what he had to do. He would go to the new government drug rehab center on Eighth Avenue. They were bragging about how they'd maintain a junkie and give him food, just to keep him "out of the cycle of crime and death."

O.K., he told himself. I'll just go

down there and see if they mean it.

He didn't even notice that he had crossed the line to calling himself a "junkie."

"Hello. I am Dr. Melniss Bettide. I'll be supervising your case, Mr.—" The small, dark man peered at the name on the chart.

"Good heavens!" he gasped. "You're Derek Blakeney!" The physician pronounced it as if he were making a rare and stunning diagnosis.

Derek forced one of his famous, confident smiles. "Fame is like a river, that beareth up things light and swoln. . . ." He shrugged nonchalantly. "Would you like an autograph, Doctor?"

"Honey! It's Derek's agent on the phone! He says Derek has won the part!"

They thought he was asleep. His father had finally sent him to bed, rather than continue pacing, hitting the walls. But that didn't keep him from waking the instant the telephone rang.

"Are you sure?" He heard his father's voice, muffled by his bedroom door. "I don't want to wake the poor kid with rumors if he's just going to be let down."

"Well, come and talk to the man yourself, then! Just a moment, Mr. Pasternak. My husband is coming to the phone."

Derek overheard murmured talk

of allowances and percentages, of shooting schedules and tutors to make up for lost schooling . . . his father was being boorishly insistent about the latter, but Derek didn't really mind.

He remembered the auditions—all those poor kids being dragged around by their crazy stage mothers, and *he* had won the part!

Why, Mom didn't even care if I made it. She just thought it would be fun to try! Dad, too, had been helpful in his gruff, skeptical way. Derek let them have their moment, fussing over the phone with the agent. His turn would come with the new day.

"Hollywood," he sighed in false cynicism. "Oh well. It's not Broadway, but it's a start." He couldn't help grinning under the covers . . . wondering if California girls were all they were supposed to be.

I'll find out, he thought. Real soon. Soon everybody in the world who goes to the movies will know me!

I'm going to be a star.

Making friends with a movie dog . . . learning the ways of the back lot . . . sailing a catamaran on location in Papeete . . . fencing lessons in Beverly Hills — the other lessons from a beautiful older actress at night in her apartment. . . .

His first drag of reefer . . . two years dodging teenage girls who swooned at the sight of him while he played *Dobie in Orbit* on TV. . . .

Singing and dancing up a storm in the Broadway version of *Borgia!* . . . getting plastered with friends . . . pulling crazy stunts . . . getting an Academy nomination for his role in *Another Roadside Attraction*. . . .

Somehow he managed to find a place in a fleabag hotel where the rent was cheap. The landlady had loved the movies and had seen every one of his plays. The people at the condominium complex held his awards and his furniture in bond for payments due.

They let him take the lava lamps.

Derek didn't care. Between the serving of the eviction notice and moving into the dingy little room, he had relived ten of the best years of his life. It wasn't a bad deal at all.

He replayed that year when he led the cast of *Potemkin at Midnight* . . . and began to hear those muttered complaints — that he was becoming self-indulgent, for instance, and intractable in his interpretations. He spurned the critics and went his own way, of course. If the reviewers groused, let them! The marks were happy. And there was always somebody eager to send out for a little more champagne — a little more coke.

Fagin's Boys, and Girls closed early, but that was because of bad directing and a flawed script. He never much liked musicals anyway, except for the chicks in the chorus line, of course.

That ThreeVee pilot for a series based on the cartoon writers of the fifties was an interesting project, but the cretins botched it with endless rewrites. It ran three months. No matter. There would always be something else.

Two weeks after moving into the fleabag, he met Melissa for the first time, again . . . not in this life, but in his memory.

He took her home to the Fifth Avenue condo. Her laughter was sweeter than music. Her wit was sharp and brilliant. He had had many lovers with dancers' bodies, but hers was special.

In her he found not just pleasure, but joy.

"Derek, honey, please wake up."

"Hmmmph. Wha? Liss, what is it?"

She held the phone to her breast. There were tears in her eyes.

Derek looked up in a fog. He had had one too many nightcaps.

"Liss? What's the matter?"

"It's Frank Furtess. He was up early and heard it on the radio. He figured we'd want to be told, and not find out in the morning papers.

"Derek, the Divine Terror Alignment has struck again. . . . Honey, they've nuked Albany."

Her voice was stark. Hollow with sadness. It took a moment for the words to soak in.

Albany?

"Blown . . . up? The whole town?"

"Oh baby. I'm so sorry."

At first all he could think of were *buildings* — the library, the high school, the drugstore in his neighborhood, all tumbled to the ground and smoking. The park, the capitol, his parents' house.

"Mom!" he croaked, sitting up. "Dad!"

He reached out, but not for the telephone.

Melissa held him while he sobbed. It had been almost a year since he had seen either of his parents in person. The last time, he had been so casual . . . he had even left without bothering to say good-bye.

This is no good, Derek thought as he came down from that particular memory trip. I'm reliving the bad stuff now. I'd better get some advice on how to get control over this drug . . . learn how to force it to draw out only the memories I want. Maybe I'll talk to that guy Bettide.

No. This just won't do at all.

He dreamt that night. Real dreams, not memories. He dreamt about smoke and fire and guilt. And he wept because there was nobody there to hold him this time around.

This is no good, Derek thought as he came down. I'm reliving the bad stuff AGAIN! Even down to those awful dreams I had when I first realized the drug was going bad. Maybe Bettide was right after all.

Oh hell, what am I going to do *now*!

Things perked up a bit when he played Anton Perceveral in *The Minimum Man*, though the critics gave most of the credit for its success to the writers of the adaptation, and to Peter Tiersjens, who directed. Derek nursed his jealousy but said nothing. For a long time he was listless except when he was onstage.

The crowds identified with Perceveral, but he just couldn't.

Melissa nursed him, teased him, cared for him. He let himself be talked into doing Falstaff over the summer, and hated it.

Peter got him the role of the decade — playing Claude Eatherly in *Enola Gay*. If anything could snap him out of his doldrums, that part should have.

It worked, sort of. He stopped moping and became arrogant. He snapped and lashed out and drank and snorted and smoked. He came home with the scent of other women on his clothes. Derek witnessed himself witnessing it all over again. He writhed within and tried to relive the experience without participating at all.

Yet a glimmer of his present self remained awake to notice things . . . things he had not seen the first time around. A piece of mail tossed in a corner. A misplaced phone message. A promise forgotten the initial time through, but noted on this passage. . . .

It didn't seem to make any difference, though. The past was fixed. The mistakes and casual cruelties repeated inerrantly. Derek struggled not to watch even as he persevered, taking larger and larger doses of the drug.

On the wall of his little room, the legs of the runner approached the finish line. . . .

Derek thought about Sycamore Street: Albany, New York . . . where his mother would be cooking a Sunday supper, his father would be reading the paper, and his room would be a clutter of plastic models, touching the air with the heady scent of glue. He willed himself back to age twelve . . . back to a place in the warehouse of his cortex where a familiar female voice was about to call out. . . .

"Supper's ready!"

Derek smiled (*foolish smile, the latest Derek thought*). It had worked! Those were exactly the words he had willed his mother. . . .

"Come on, Lothario. . . ." Melissa slid the door open, and Derek witnessed a former self being surprised, and a still earlier self snarl and curse. As the woman made her decision, and turned to leave, he felt, simultaneously:

"*Good riddance!*"

"*Melissa, don't go!*"

And this time added: "Oh shut up, you fool; can't you see she's gone for good?"

"Drink." Bettide gestured without looking up.

Derek grimaced but drank the supplement. "Have they found any more cases like me, Doc?"

Bettide licked his pencil. "A few."

"As to your problem of sequential memory access," he went on. "I think we might have a possible solution."

Derek edged forward to listen.

Derek awoke in a sweat. He shivered as he realized what was happening. The sequential memories were rapidly approaching the present. Soon he would begin recalling memories of recalling memories of recalling memories!

Where would it end?

He lay in the damp bed and wondered for the first time about the nature of his present existence.

He checked his own reality by every test he could devise — from pinching himself to reciting Shaw backward — but none of them proved for certain that he had never been this way before . . . that he had free will and was not merely reliving another memory at this very moment, in some future self's Temporin-induced trip.

"I expected something like this might happen, Derek. But you must be stalwart. Remember Anton Perceval? Stick with it, and I think we can get out the other side."

Derek's hands shook as he drank

the required supplement. He put down the beaker and looked from Bettide to the little black notebook and back. "I'm just an experiment to you," he accused.

Bettide shrugged. "Partly, perhaps. You are also my patient. And an artist whom I would dearly like to return to society. Fortunately all three imperatives make for a common goal. Now, *will* you agree to coming to the clinic so I can keep you under observation?"

Derek lowered his head into his hands. "I don't know. I just don't know. I'm lost in Time, Doctor. My thoughts and memories are a whirlwind. Nothing stands *still* anymore!"

For a long moment there was silence in the cubicle, broken only by the muttering of the ventilation system. Then Bettide spoke softly:

*But thoughts, the slaves of Life,
and Life, Time's fool,
And Time, that takes a survey of
all the world,
Must have a stop.*

Derek looked up and blinked. For a clear moment the shabby office seemed built wholly of crystal — the clocks all halted — and the breath of the universe held in expectant quiet. Light refracted through the diamond walls.

He knew, right then, that this moment was a new one, whether remembered a thousand times or not

... even if witnessed by a hundred thousand versions of himself.

Each instant is itself, and nothing more. Each a heartbeat of God.

The epiphany passed with another blink of his eyes. Bettide wiped his glasses and looked at Derek myopically, awaiting an answer.

"I'll let you know, Doctor," Derek said quietly as he stood up. "I will be back tomorrow. I promise."

"All right, Derek. I'll tell the receptionist to let you in at any time."

Derek paused at the door.

"Thank you," he said softly. Then he went out into the wintry afternoon.

The park was nearly empty. Derek climbed the steps to the Summer Theater. He stood on the stage and looked up at the city for over an hour, not moving or speaking, but nevertheless playing a part.

The ampoule gleamed in the light from the torn window shade. Derek looked at the little glass vial and decided he at last understood Anton Perceval.

What else have we, he thought, when we have mined ourselves a tunnel all the way to hell, than the option of digging farther and hoping for a world that's round?

6.

Show last week, Derek. You were very good. ..."

... the runner on the wall lengthened his stride. ...

Enola Gay closed before summer. ...

"The Catskills? Jeez, Peter, what would I do in the friggin' Catskills ...?"

... he had the satisfaction of punching Todd Chestner ... but even the groupies drew back after that. ... He went home alone. ...

"Mr. Blakeney, you've given a bunch of ambitious young actors an object lesson on the dangers of success. ..."

"... It's called Time-Jizz ... the latest thing from th' Black Chemists. ..."

He came home to his fleabag to find a pile of bills. ... He broke the seal and held the ampule over his vein ...

... mixed the powder, and drank, thinking about glue and plastic and little sticky decals ...

... and found himself laughing ... high, clear, childish laughter. ...

Derek relived Derek reliving Derek reliving. ... The boys laughed together, and Derek laughed along. But this time he struggled not to lose consciousness. He was ten again. But ten was no longer a goal. It was a way station. He lived as a child again, but this time he watched.

• • •

 saw *Realm of Magic* on the Late

"Darling, don't go into the water!"

"Aw, Mom!"

But Jennifer had made slightly veiled promises . . . overhead a jet plane growled. . . . At one time he had wanted to be a pilot, but that was patsy's work. . . .

"Oh Derek, you were wonderful!"

"Mr. Blakeney, you owe four months' rent. . . ."

". . . the Black Chemists have upped the price. . . ."

"Good Lord!" Bettide hissed. "You're Derek Blakeney!"

"Honey! The agent says Derek's got the part!"

. . . Making friends with a movie dog . . . an older actress at night . . . first reefer . . . teenage girls swooning. . . . A fleabag hotel where he could continue taking the drug and relive leading the cast of *Another Roadside*. . . . Meeting Melissa, her laughter sweet, her smile bright . . . joy. . . .

"Derek, honey, the terrorists. . . ." She held him . . . but then she wasn't there to hold him anymore.

The scenes flickered from a plush condominium to a cheap room. From cheering audiences to downer reviews. Somewhere in the midst of it all, Derek realized that he was replaying memories that had accumulated at the beginning of *this* very session with the drug . . . that like Achilles chasing the Hare, he was parsing his life into more and more rapid cycles. The closer he got to the "present,"

the more cycles had accumulated and the more densely packed they were —each a lifetime to be relived!

—"But thoughts, the slaves of Life—"

Bless the Mercy Law, he thought, opening the shoe box. . . . The runner passed the edge of the doorway.

"Supper's ready!"

"Good-bye, Derek." The door slammed.

"*Good riddance*. . . ."

"Melissa, *don't go!*"

"*You fool, she's gone.*"

This time he added, "Yes, she's gone. But do you care enough to *follow* her?"

Derek grimaced and sipped the supplement. . . . "Have they found any more like me, Doc . . . ?"

"I saw *Realm of Magic* on the Late Show, Derek. . . ."

"What would I do in the friggin' *Catskills* . . . ?"

Even the groupies drew back. . . .

". . . an object lesson on the dangers of. . . ."

"They call it Time-Jizz. . . ."

. . . picked up the ampoule . . .

. . . mixed the powder

. . . picked up the ampoule . . .

. . . found himself laughing,
high and clear . . .

and laughed along

and laughed along but watched
and carefully watched. . . .

—“And Time, that takes survey of
all the world—”

The runner found his stride. . . .

“Good-bye, Derek.”

“Good riddance. . . .”

“Don’t go!”

“You fool, she’s gone.”

“Yes, but do you care enough to
follow her?”

*“How, you idiot? How can I fol-
low when the past is locked, and the
flashbacks multiply faster than I can
experience them? I can’t even get
off!!”*

Derek sipped vitamins. . . . “... any
more like me, Doc . . . ?”

“... saw *Realm of Magic*. . . .”

“... the friggin’ *Catskills*. . . .”

“... an object lesson. . . .”

“They call it Time-Jizz. . . .”

... picked up the ampoule . . .

... picked up the ampoule . . .

... picked up the ampoule . . .

... mixed the powder . . .

... found himself laugh-
ing, high and clear . . .

... and laughed along and laugh-
ed along and laughed along, but
watched and watched and
watched and watched. . . .

—“And Time—”

—“ Good riddance. . . .”

—“ Don’t go!”

—“ She’s gone.”

—“ Will you follow?”

—“ How? I can’t even get off!”

Derek added another layer.

He laughed . . . high and clear.

—“Must have a stop—”

The runner persevered. There
really wasn’t anything else to do.

. . . .

Coming soon

Next month: two very different and creepy tales by Ian Watson (“Salvage Rites”) and Bob Leman (“Olida”), along with science fiction from James White (“The Interpreters”).

Soon: new stories by Andrew Greeley, Kate Wilhelm, Vance Aandahl, Nancy Kress, Wayne Wightman, Charles Sheffield, Kim Stanley Robinson and others.

Use the coupon on page 161 to enter your own subscription or to send a holiday gift.

Fest Competition

REPORT ON COMPETITION 41

In the August issue we asked you to fuse two or more SF titles, with the first word (or words, as it turned out) of one title being the same as the last word of the previous title. Many found this contest a bit more difficult than usual but also most stimulating and challenging. And, as usual, you were quite up to the challenge. The winners:

FIRST PRIZE

STUART LITTLE, BIG

ALWAYS COMING HOME IS THE
HANGMAN

A WIND IN THE DOOR INTO
SUMMER

PAINGODBODY

THE FEMALE MAN PLUS X

DOCTOR WHO GOES THERE?

WORLDS OF IF THIS GOES ON THE
BEACH

Mark. Bernstein
Ypsilanti, MI

SECOND PRIZE

LOVE IS THE PLAN, THE PLAN IS
DEATH AND THE SENATOR

TO YOUR SCATTERED BODIES GO,
GO, GO, SAID THE BIRD

CAN YOU FEEL ANYTHING WHEN I
DO THIS MOMENT OF THE
STORM

SOLDIER, ASK NOT WITH A BANG
BORN WITH THE DEAD ZONE

THE NUMBER OF THE BEAST THAT
SHOUTED LOVE AT THE HEART
OF THE WORLD MENDERS

TO SERVE MAN PLUS

Angus MacDonald
Concord, CA

RUNNERS UP

THE BIG TIME AND AGAIN, DAN-
GEROUS VISIONS

A CONNECTICUT YANKEE IN KING
ARTHUR'S COURT MARTIAL OF
GEORGE ARMSTRONG CUSTER

MEDEA: HARLAN'S WORLD OF
WOMEN MEN DON'T SEE

THE ALIEN WAY THE FUTURE WAS
HORTON HEARS A WHO?

Michael D. Toman
Torrance, CA

SONGS FROM THE STARS MY DESTI-
NATION

THE GAME BEYOND THE BLUE
EVENT HORIZON

THE MAN WHO WAS A LEGEND IN
HIS OWN TIME MACHINE

THE FOREVER WAR OF THE WORLDS
OF IF ALL MEN WERE BROTHERS,
WOULD YOU LET ONE MARRY
YOUR SISTER?

THE DEMOLISHED MAN PLUS

Judith Tarr
New Haven, CT

SHAKESPEARE'S PLANET OF THE
APES

MY FAVORITE MARTIAN CHRON-
ICLES

**TO CAGE A MAN WHO WOULD BE
KING SOLOMON'S MINES**

**THE VERY SLOW TIME MACHINE
STOPS**

**SLAUGHTERHOUSE-FIVE AGAINST
THEBES**

**Marc Laidlaw
San Francisco, CA**

THE FEMALE MAN IN THE MAZE

**THE CENTRIFUGAL RICKSHAW
DANCER AT THE END OF TIME**

**EYE OF THE CAT WHO WALKS
THROUGH WALLS**

**THE FELLOWSHIP OF THE RING-
WORLD ENGINEERS**

BRAVE NEW WORLD WRECKERS

JESUS ON MARS, WE LOVE YOU

**Bill and Ann Hupe
Lansing, MI**

**THE GNURRS COME FROM THE
VOODVORK OUT OF THE SILENT
PLANET OF THE VOLES**

**A WORLD OUT OF TIME ENOUGH
FOR LOVE AINT NOTHING BUT
SEX MISSPELLED**

**Bruce Berge
Inglewood, CA**

HUYSMAN'S PET SEMETARY

VENUS OF DREAMSNAKE

**Chris East
Fredonia, NY**

COMPETITION 42 (suggested by Donna and Chuck Peitzman and Stephen Mendenhall)

Vary the title of any mainstream or non-SF work to turn it into a science fiction or fantasy piece, E.G.:

**UNCLE TOM'S SPACESHIP
BRIGADUNE**

MINDBRIDGE OVER THE RIVER KWAI

IS THERE INTELLIGENT LIFE ON THE MISSISSIPPI?

A FAREWELL TO CHARMS

Please limit yourself to 10 entries.

Rules: Send entries to Competition Editor, F&SF, Box 56, Cornwall, Conn. 06753. Entries must be received by December 15. Judges are the editors of F&SF; their decision is final. All entries become the property of F&SF; none can be returned.

Prizes: First prize, eight different hard cover science fiction books. Second prize, 20 different sf paperbacks. Runners-up will receive one-year subscription to F&SF. Results of Competition 42 will appear in the April Issue.

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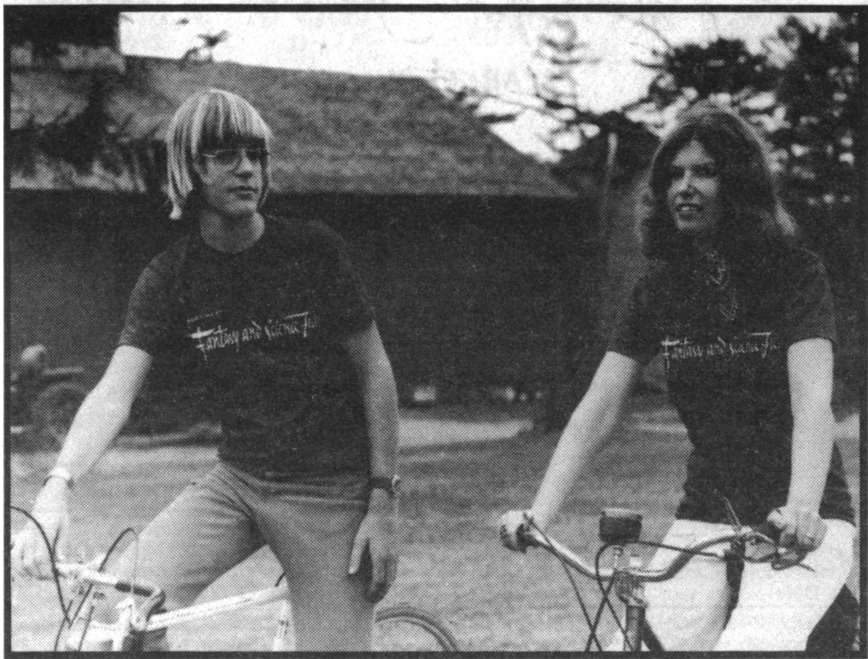
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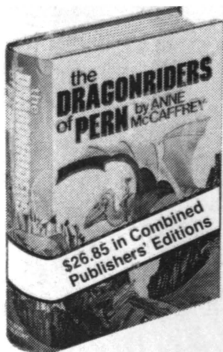
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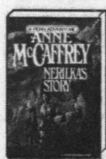
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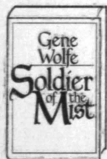
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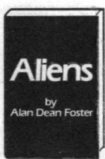
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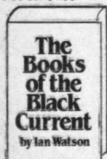
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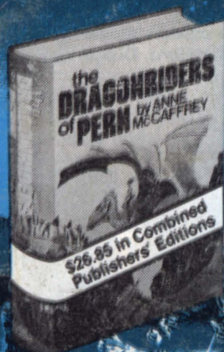
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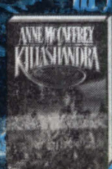
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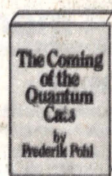
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